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# STRATEGIC AIR COMMAND OPERATIONS IN THE CUBAN CRISIS OF 1962

## HISTORICAL STUDY NO. 90 VOL. 1



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STRATEGIC AIR COMMAND OPERATIONS  
IN THE CUBAN CRISIS OF 1962

HISTORICAL STUDY NO. 90

VOLUME I



THOMAS S. POWER  
General, USAF  
Commander in Chief

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## PREFACE

This is a history of Strategic Air Command's role in the Cuban crisis of October and November 1962. It emphasizes reconnaissance activities and the unprecedented alert generation of SAC bombers and missiles. It is history written close to the event. Dr. Kent Roberts Greenfield, director of the United States Army's World War II history project, believes that ". . . unless history is written promptly it cannot be written either correctly or adequately."<sup>1</sup> The SAC staff agrees with this distinguished historian and would add that unless it is written promptly it cannot serve the immediate and long-range requirements of SAC and the Air Force. It has never been the function of the Air Force historian to write history for history's sake. (U)

During the crisis a member of the SAC historical staff was on duty in the operations war room 24 hours a day, seven days a week. There he was able to follow events through the displays, briefings, informal discussions with battle staff personnel, and by examination of hundreds of messages which flowed in and out of the combat reports center. On a daily basis he was responsible for compiling a chronology of events for the Chief of Staff. The historian found this personal experience to be of particular value in comprehending the extent of SAC's involvement as

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1. Kent Roberts Greenfield, The Historian and the Army (Rutgers University Press, New Jersey, 1954), p 6.

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events unfolded during those tense autumn days. It was an experience for which no document could substitute. (U)

The fuse was removed from an explosive situation when Premier Khrushchev removed his missiles and bombers from Cuba. Thus the immediate problem was surmounted, and on terms favorable to the United States. But the crisis did not leave Cuba with the missiles. The larger issue of the presence of Soviet arms and troops in the Western Hemisphere remains. The island is a heavily armed Soviet bastion which threatens to become a sally port for Communist infiltration of Latin America. As this history is completed SAC U-2 aircraft still fly over the island, diplomatic negotiations continue in an attempt to remove Soviet troops, and an angry debate over past, present, and future Cuban policy still rumbles through the land. (U)

The narrative portion of this history was prepared by Robert Kipp, Lynn Peake, and Herman Wolk. It is supplemented with volumes of selected documents and photos. A footnote citation ending with an exhibit number, e.g., Ex 15, means that document is number 15 in the accompanying volumes of documents. Also, particularly significant photos, e.g., a series on Soviet missile sites in Cuba, contained in the photo volume are referred to in the footnotes. (U)

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## TABLE OF CONTENTS

### VOLUME I

<u>Chapter</u>		<u>Page</u>
I	RECONNAISSANCE . . . . .	1
	Electronic Intelligence and Weather Flights . . . . .	1
	The U-2 Over Cuba . . . . .	6
	Sea Search. . . . .	21
	Summary . . . . .	25
II	BOMBER AND TANKER OPERATIONS . . . . .	30
	Florida Evacuation. . . . .	30
	Increased Readiness Posture . . . . .	33
	Airborne Alert . . . . .	36
	Medium Dispersion . . . . .	49
	Force Generation and Status (Defcon 2) . . . . .	55
	Phasedown . . . . .	59
III	THE MISSILE ALERT. . . . .	62
IV	COMMUNICATIONS . . . . .	79
V	INFORMATION POLICIES . . . . .	94
VI	SUMMARY. . . . .	96
	FOOTNOTES. . . . .	101
	Chapter I . . . . .	101
	Chapter II. . . . .	110
	Chapter III . . . . .	119
	Chapter IV. . . . .	123
	Chapter V . . . . .	126
	Chapter VI. . . . .	127
	LIST OF EXHIBITS . . . . .	128

### VOLUME II

Photographs

### VOLUME III

Exhibits, Chapter I, and Chapter II, 1-50

### VOLUME IV

Exhibits, Chapter II, 51-76; Chapters III, IV, and V

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NOTE

Most references in the text of this history express time by using the date-time group. The first two figures denote the day of the month, the next four the hour of the day at Greenwich, England (Zulu Time). Consequently, 25/1800Z Nov is 1800 hours at Greenwich on 25 November.

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Primary Alert message from General T. S. Power to all his commanders,  
24 October 1962:

"THIS IS GENERAL POWER SPEAKING. I AM ADDRESSING YOU FOR THE PURPOSE OF REEMPHASIZING THE SERIOUSNESS OF THE SITUATION THIS NATION FACES. WE ARE IN AN ADVANCED STATE OF READINESS TO MEET ANY EMERGENCIES AND I FEEL THAT WE ARE WELL PREPARED. I EXPECT EACH OF YOU TO MAINTAIN STRICT SECURITY AND USE CALM JUDGMENT DURING THIS TENSE PERIOD. OUR PLANS ARE WELL PREPARED AND ARE BEING EXECUTED SMOOTHLY. IF THERE ARE ANY QUESTIONS CONCERNING INSTRUCTIONS WHICH BY NATURE OF THE SITUATION DEVIATE FROM THE NORMAL, USE THE TELEPHONE FOR CLARIFICATION. REVIEW YOUR PLANS FOR FURTHER ACTION TO INSURE THAT THERE WILL BE NO MISTAKES OR CONFUSION. I EXPECT YOU TO CUT OUT ALL NON-ESSENTIALS AND PUT YOURSELF IN A MAXIMUM READINESS CONDITION. IF YOU ARE NOT SURE OF WHAT YOU SHOULD DO IN ANY SITUATION, AND IF TIME PERMITS, GET IN TOUCH WITH US HERE."

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## Chapter I

### RECONNAISSANCE

~~Strategic Air Command's participation in reconnaissance of Cuba~~

can be separated into roughly three parts: electronic intelligence (ELINT), photographic overflights, and sea search. The first two were the most extensive, of the longest duration, and required the heaviest commitment of crews and aircraft; the third was a special mission of a unique nature and of short duration to assist the United States Navy. The historian decided to discuss them in this sequence. In this way the story was kept close to a strictly chronological pattern, but continuity within each part was still maintained.

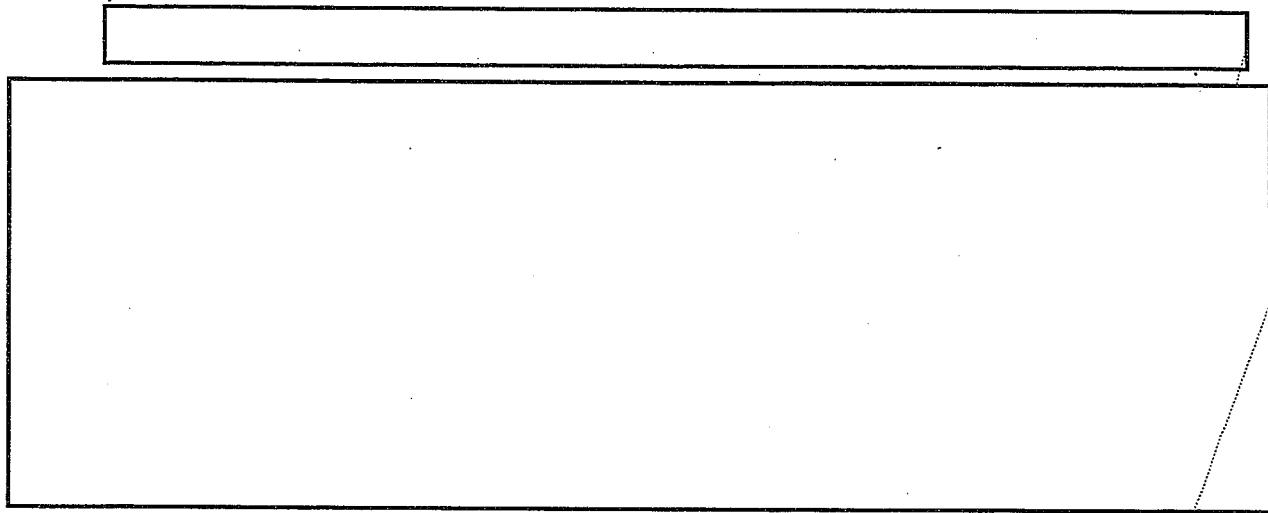
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#### Electronic Intelligence and Weather Flights

Castro's Cuba had been under photographic surveillance for at least seven months prior to October 1962. Covert U-2 flights by the Central Intelligence Agency obtained a record of the defensive build-up of Soviet military strength on the island.<sup>1</sup> Strategic Air Command's part in the operation, however, began not with photography but with electronic reconnaissance. In June, USAF gave this command control of flights performed by an [redacted] GC-130 out of MacDill AFB, Florida, to the vicinity of Cuba. The aircraft was equipped with [redacted] Nickname of the operation was Quick Fox.<sup>2</sup> The SAC eventually relinquished command and control of the mission to Tactical Air Command on 4 November.<sup>3</sup> Actual

participation by SAC crews and aircraft in surveillance, however, started in September with the JCS requirement [for electronic intelligence (ELINT) or ferret missions to the periphery of Cuba.] Assigned to this work was the 55th Strategic Reconnaissance Wing, Forbes AFB, Kansas.<sup>4</sup> ~~(TS)~~ INC 00



5 (S)

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- (4) (S)

The initial requirement for electronic reconnaissance of Cuba, nickname Common Cause, specified only weekly flights. They were overt,

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using normal Air Route Traffic Control and International Civil Aviation Organization procedures. But to preclude having to file a flight plan with Cuban authorities, the planned route was submitted as a flight from Forbes to Miami, Key West, and return to Forbes. When the aircraft arrived at Miami it requested local clearance [for the time required to complete the ELINT portion of the mission] and then, when returning to the U.S., the pilot requested a change of flight plan from Miami (if diverting into a Florida base) or New Orleans (if returning to Forbes).<sup>6</sup> Every precaution was taken to keep from overflying Cuba and thereby triggering Cuban air defenses, but fighter cover from Florida or Guantanamo Naval Base could be called for should it be needed. The R-47Hs could also "fire to destroy" if a hostile interceptor indicated it was going to attack.<sup>7</sup> ~~(T)~~ & ~~TACCO~~

The first R-47 ELINT mission against Cuba left Forbes AFB at dawn (1100Z) 14 September. Its objective was to search for [redacted]

[redacted]  
\* During its nine hour mission, the aircraft was refueled once by a KC-135 of the 96th Air Refueling Squadron, Altus AFB, Oklahoma. Upon return to Forbes, all [redacted] and film were flown to Offutt AFB for processing and distribution by the 544th Reconnaissance Technical Group.<sup>8</sup>

\* The objectives of the mission remained substantially the same throughout the crisis. (U)

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This group continued to process all ELINT materials throughout the Cuban crisis.<sup>9</sup> ~~(TS)~~ ~~IN COO~~

The 55th Wing flew four more missions before 14 October.<sup>10</sup> On that date SAC raised the requirement to two a day.<sup>11</sup> On 14, 15, 17, 18, 19, and 20 October two were flown.<sup>12</sup> On the 23rd, 24th, and 25th there was a return to one, and then another increase to three a day, which continued throughout October and until 22 November when the JCS authorized a return to one a day.<sup>13</sup> ~~(TS)~~

In the period under scrutiny in this history (September, October, and November) the 55th SRW flew ~~116~~ Common Cause ELINT missions (1065:20 hours) with only six aborts, all in November.<sup>14</sup> By the end of October

~~15~~

~~(TS)~~ ~~IN COO~~

Another responsibility placed on the 55th Wing beginning 14 October was weather reconnaissance flights (nickname Blue Ink) to support the newly begun U-2 missions. Weather was an important factor in planning the high altitude photo flights. The wing flew from an operating location (OL 6) at MacDill AFB, Florida. At the direction of Headquarters SAC, one or two R-47K aircraft a day made a circuit of Cuba. Weather information was relayed to SAC by single sideband radio.<sup>16</sup> Eighteen missions were flown in October, averaging six hours a mission.<sup>17</sup> No sorties were flown from 28-31 October, because of the interruption

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of U-2 flights,<sup>18</sup> but they were resumed 1 November.<sup>19</sup> From that date until 1 December, the 55th SRW flew 54 missions.<sup>20</sup> No outstanding problems developed that handicapped their completion; however, an R-47H\* crashed on takeoff from MacDill on 11 November, killing the crew of three. Cause of the accident was not determined.<sup>21</sup> ~~(b) u u~~

A potentially dangerous situation for all R-47s flying near Cuba did develop in late October. Pilots began to report interceptions by U.S. fighters.<sup>22</sup> The SAC, although recognizing the need for fighters to approach for identification, warned that tail chase and lock-on by fire control systems "can be disastrous" for the fighter. In one instance, because of darkness, identification by an R-47 of a friendly aircraft was made only at the last moment. It was only because of the pilot's decision to take the risk that the fighter was not fired upon.<sup>23</sup> To SAC, these incidents proved the inadequacy of CINCLANT procedures for timely warning of hostile intent against recon aircraft.<sup>24</sup> To remedy the situation CINCLANT asked that all aircraft engaged in peripheral reconnaissance (but not overflight) show a normal IFF/SIF recognition signal.<sup>25</sup> Instruction subsequently went out to the 55SRW to comply.<sup>26</sup> Warnings also went to CONAD and Navy units to stay clear of the R-47 tail area.<sup>27</sup> This seemed to solve the problem because no further incidents were reported. ~~(b) u~~

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\* This H model had been sent to MacDill to replace a K aircraft sent to Forbes for camera modification. ~~(b) u u~~

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Before completing this review of ELINT activities during the Cuban crisis, brief mention should be made of a single flight by an ELINT equipped YB-58. Headquarters USAF ordered the mission; the Air Force Systems Command provided the aircraft; General Dynamics provided the crew; and SAC planned the mission. Executed on 30 October, the aircraft flew a mission along the northern coast of Cuba, going no closer than 35 nautical miles. Data from the aircraft's small ELINT package, which covered the [redacted]

[redacted] did not reveal anything significant. Most of the [redacted] were

28

*TSR Kep SECDEF  
INCOO*

#### The U-2 Over Cuba

Turning now to photographic reconnaissance, it has been noted that CIA U-2s had been flying over Cuba since the spring of 1962. Their photos enabled U.S. intelligence officers to identify modern missile equipped patrol boats, operational surface-to-air missile sites (SAM), short range cruise missile sites, and modern MIG-21 fighters.\* These large scale military preparations seemed to point to a determined Soviet effort to consolidate their position in the

\* President Kennedy publicly confirmed the presence of this equipment but at that time he had ". . . no evidence of any organized combat force in Cuba from any Soviet Bloc country; of military bases provided to Russia; of a violation of the 1934 treaty relating to Guantanamo; of the presence of offensive ground to ground missiles; or of other significant offensive capability in Cuban hands or under Soviet direction and guidance." (New York Times, 5 Sep 62.) (U)

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Western Hemisphere. Although there were reports of construction of ballistic missile sites on the island, CIA flights were unable to verify them.<sup>29</sup> (S) (U)

In early October the Defense Department was taking steps to get the responsibility for reconnaissance of Cuba transferred to the military. Strategic Air Command first entered the picture when a representative from AFCIG-5 arrived at Offutt AFB on 3 October with a request that this command submit a plan to the DOD for photo reconnaissance of the island.<sup>30</sup> Operations and intelligence officers immediately went to work and the next day (4 October) Operations Plan 67-63, nickname Brass Knob, was on its way to the Pentagon.<sup>31</sup> (S) (U)

To prepare for the flights, SAC sent two experienced U-2 pilots of the 4080th Strategic Wing (4028th Strategic Reconnaissance Weather Squadron), Majors Richard S. Heyser and Rudolf Anderson, Jr., to Edwards AFB, California, for qualification in the new U-2F model.<sup>32</sup> This aircraft had a J-75 engine, giving it higher thrust than the J-57 of the U-2A model standard in the 4080th. The F model could climb 5,000 feet higher than the A model, to 75,000 feet, and it had provisions for in-flight refueling.<sup>33</sup> The two Fs at Edwards belonged to the Weather Reconnaissance Squadron Provisional (WRSP-4) stationed at that base.\* Heyser, arriving first, made local flights in the aircraft on 12 and 13 October, emphasizing takeoffs and landings.<sup>34</sup> (S) (U)

\* Further information concerning this unit cannot be divulged because of the sensitivity of its mission. (U)

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On 12 October General Power was also landing, 2000 miles away in Washington, on the way home from an overseas inspection tour. At a luncheon meeting with the Secretary of the Air Force the need for Air Force photo reconnaissance over Cuba was discussed. When questioned regarding SAC's capability to perform the mission, the CINCSAC assured the Secretary that his pilots could be checked out in the U-2F and overfly Cuba by Sunday (14 October).<sup>35</sup> That afternoon SAC received official direction to begin overflights as soon as possible.<sup>36</sup> ~~(TS) S-1 IN CO~~

A call went out to the 4080th Wing to send a launch team to Edwards AFB. The wing commander, Colonel John A. Des Portes, gathered a team of 21 specialists and left for California that night. Waiting for them was Major General K. K. Compton, SAC Director of Operations, and Major General James W. Wilson, Director of Materiel. They told the team to prepare the U-2Fs for two flights on 14 October. Personnel of WRSP-4 and Lockheed Aircraft Corporation (manufacturer of the aircraft) assisted.<sup>37</sup> ~~(TS) S-1 IN CO~~

Major Heyser's U-2F was prepared and loaded with a B camera configuration and two ELINT systems  He took off at 1130 pm

\* The primary payload of the U-2 consists of various camera configurations. They are designated as A-1, A-2, and B. Any one of these may be installed in the equipment bay aft of the cockpit, depending on the type of mission. Two types of lower equipment bay hatches are provided with window locations for the corresponding camera configuration. In addition to the main camera load, a tracker camera is mounted in the aft end of each hatch. It records the terrain from horizon to horizon and is used to document the complete path of a mission. ~~(S)~~ (Cont'd)

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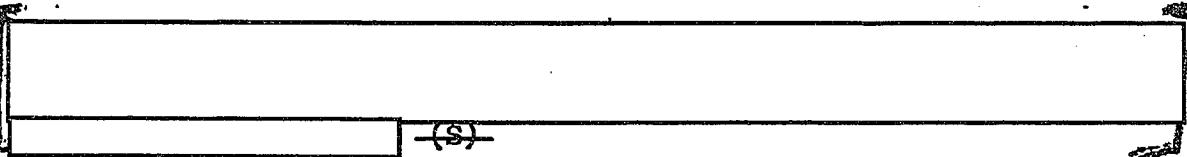
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Pacific Standard Time from Edwards and turned his aircraft southeast over Arizona, New Mexico, and Texas. Reaching the Gulf of Mexico, he continued southeast, passing over the Yucatan Channel between Mexico and Cuba. Then some 70 miles south of the Isle of Pines, off the southwestern coast of Cuba, he executed a left turn, and flying slightly northwest, approached Cuba. Passing to the west of the Isle of Pines, Heyser turned on his cameras as he coasted in over the low swampy coastline of Pinar del Rio province. Passing quickly over the low hills of the Sierra de los Organos, and the narrow northern coastal plain, he turned northeast again over the Gulf of Mexico, landing at McCoy AFB, Florida, at 1130 am EST, about seven hours after leaving

(Cont'd)

During the Cuban crisis, with the exception of two abortive attempts to use a new C configuration, only the B and tracker cameras were used on U-2 flights. The B configuration, made by the Hycon Corporation, Pasadena, California, is an automatic 36-inch focal length, high altitude camera system. It consists of one camera weighing approximately 420 pounds. Its maximum film load is two 6,000 foot rolls. From operating altitude a vertical photograph gives a coverage of 6.5 by 6.5 miles. There are seven basic positions from which this camera can take pictures: three right oblique, one vertical, and three left oblique. (S)

The tracker camera, manufactured by Perkin-Elmer Corporation, Norwalk, Connecticut, has a 3 inch focal lens and weighs 58 pounds loaded. It carries 1,000 feet of 70 millimeter film. Duration of the film is about 10 hours. (S)

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("Basic Flight Handbook for Use of the U-2," Section IV, pp 4-29, 4-31, 4-37.)

California.<sup>38</sup> The exposed film from his cameras was immediately unloaded and personally flown to Washington by the SAC Director of Intelligence, Brigadier General Robert N. Smith, for processing and interpretation.<sup>39</sup> ~~(TS)~~ ~~ELINT collection against Cuba, INCO~~

Most of the 4080th team which had prepared Heyser's aircraft for the first mission were on hand at McCoy to receive him. They had left Edwards for the Florida base, accompanied by Generals Compton and Wilson, even before Heyser had left. There, some 30 members of an existing WRSP-4 detachment were absorbed and the group designated Operating Location X under the command of Colonel Des Portes.<sup>40</sup> ~~(TS)~~ ~~ELINT collection against Cuba, INCO~~

While Heyser flew his mission, back at Edwards Major Anderson's aircraft was found to have a defective tail strut after two sorties. A new one had to be flown in from the Lockheed plant at Burbank, California. It was late in the day before the new strut was affixed to the U-2. Two missions had been planned for the 15th, Heyser from McCoy and Anderson from Edwards, but now the hour was late and crew rest became a problem for Anderson. If he left from Edwards he would have to launch soon after midnight, but if he left from McCoy he would get four additional hours of rest, because he would not have to leave until just before dawn.

Therefore, SAC had the aircraft ferried to McCoy by a WRSP-4 pilot and a KC-135 of the 93rd BW was dispatched to take Anderson to McCoy.<sup>41</sup> ~~(TS)~~ ~~ELINT collection against Cuba, INCO~~

There, on the morning of 15 October, he and Heyser took off on missions of about five hours each, this time photographing virtually the entire length of the island. From May to November was Cuba's

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[REDACTED]  
rainy season, but the sky over the island on the 15th, like the previous day, was remarkably clear of cloud cover. <sup>42</sup> (TS) <sup>4</sup> <sub>11</sub>

The film from these three reconnaissance flights (14 and 15 October) provided conclusive evidence of the existence of strategic missiles in Cuba and directly precipitated Presidential action on 22 October to quarantine Cuba. <sup>43</sup> Heyser's photos revealed three Medium Range Ballistic Missile (MRBM) sites near San Cristobal. At one site four launchers were in place. At the other two equipment was still moving into the site area. The equipment was highly mobile, and it seemed every effort was being made to make the site operational as soon as possible. On 15 October two Intermediate Range Ballistic Missile (IRBM) sites were found at Guanajay. Each site had four launch pads and was similar in construction to a site in the Soviet Union believed to use a highly reliable 2000 mile missile having a 3 to 6 megaton yield and a circular error probable of 1.5 nautical miles. On the same day a cruise missile site was discovered at Santa Cruz del Norte, and the first positive identification of Il-28 "Beagle" \* bombers in Cuba was made on San Julian Airfield. These, however, were still crated. <sup>44</sup> (TS) <sup>4</sup> <sub>11</sub>

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\* The Il-28 "Beagle" first appeared in numbers over Moscow in May 1960 and had been the standard twin jet tactical bomber of the Soviet Air Force for many years. It has a range of 1,490 to 1,550 miles and a maximum speed of 580 miles per hour. Its payload is about 4,400 pounds. (Jane's All the World's Aircraft, 1961-62, pp 337-338.) (U)

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No missions were scheduled for 16 October and the 4080th team at McCoy used this respite to prepare an operations headquarters and to establish a secure communications link with Headquarters SAC. The next day six flights were ordered. Majors Heyser and Anderson left from McCoy in their F models. Majors James A. Qualls and Buddy L. Brown and Captains Roger H. Herman and George M. Bull flew from Laughlin AFB in regular 4080th A models.<sup>45</sup> These six photographed the length of the island, their routes forming tight parallel lines.<sup>46</sup> The good weather held: pilots reported about 80 per cent of the island free of cloud cover.<sup>47</sup> Heyser, Anderson, and Brown returned to McCoy; the others to Laughlin. Except for Brown, whose B configuration malfunctioned, all reported their cameras worked well.<sup>48</sup> (TS) u

Photography on the 17th provided further evidence of the gravity of the situation. Two more MRBM sites were found. At Santa Clara Airfield 39 MIG-21 and 20 MIG-15 aircraft could be counted. Il-28 bombers were being assembled at San Julian.<sup>49</sup> (TS) u

Majors Heyser and Anderson went out again on 18 October on six-hour missions. Heyser covered roughly the western two-thirds of the island and Anderson the eastern one-third.<sup>50</sup> The next day, Major Edwin G. Emerling and Captains Gerald E. McIlmoyle and Robert L. Primrose, leaving Laughlin, covered the length of the island, and landed at McCoy.<sup>51</sup> (TS) u

These missions identified the third IRBM site in Cuba, at Remedios, and the sixth MRBM complex, at San Cristobal. Thus, between 14 and 19

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October SAC U-2s had found six MRBM sites, three IRBM sites, and about 22 Il-28 bombers -- all definitely offensive weapons.<sup>52</sup> This unmistakable evidence that the Soviet buildup in Cuba had entered a new phase, as mentioned previously, caused the President to establish a strict quarantine of the island to prevent further shiploads of offensive weapons from arriving, and to call on Premier Khrushchev to withdraw those already there.<sup>53</sup> (b) (c)

By 20 October SAC U-2 activities at McCoy had begun to assume the aspect of a routine operation. Additional crews and support personnel flown in from Laughlin brought the OL X complement to 11 pilots, 4 navigators, and 68 airmen.<sup>54</sup> The day of a U-2 pilot slated for a mission began soon after midnight when he awoke, had breakfast, and went to the Operations building for his preflight briefing. By this time operations planners had completed the pilot's mission folder using information received from the SAC Headquarters Reconnaissance Control Center the previous evening. Navigation, intelligence, and weather were the main topics of the briefing. Two hours before takeoff the pilot had a medical check and began to don his pressure suit. One hour before takeoff he began to breathe 100 per cent oxygen. Preliminary cockpit checks occupied the time just before launch. The pilot usually left McCoy about eight o'clock local time and the mission lasted two to five hours. His debriefing upon return consisted of mission information such as takeoff, landing, and turning point times; weather; sightings; and evaluation of equipment performance.<sup>55</sup> (b) (c)

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Three missions were flown over Cuba on the 20th, 22nd, and 23rd. All equipment worked well, except during Captain Primrose's flight of the 22nd when his C configuration camera (for taking a 600 nautical mile flight line photograph) malfunctioned.<sup>56</sup> Weather along the U-2 flight paths on the first two days continued favorable and then began to deteriorate. On 23 October pilot estimates of coverage dropped to 50, 20, and 10 per cent.<sup>57</sup> Weather caused SAC to cancel two flights on the 24th,<sup>58</sup> and although on the next day a single mission was flown, the pilot estimated no coverage of his targets in northwestern Cuba because of solid undercast conditions.<sup>59</sup> Weather in the target area cancelled missions on the 26th and all but one on the 27th.<sup>60</sup> ~~(TS)~~ u

On the morning of 27 October Major Rudolf Anderson, Jr., left McCoy on his sixth mission over Cuba since 15 October. He did not return. No contact was made with him after he left McCoy.\* The aircraft was assumed missing when its fuel was exhausted.<sup>61</sup> A search by Navy and Air Force rescue units failed to discover any trace of the aircraft or its pilot. They did not because he had been shot down and had crashed on the island. ~~(TS)~~ u

Major Anderson would probably have scoffed at the suggestion that his work over Cuba could be termed heroic. He was a veteran reconnaissance pilot, accustomed to long silent flights in the U-2. He was a

\* Flights were carried out in radio silence except for an operations normal (one way) after leaving Cuba to Guantanamo and the same message to Key West when abeam of that station homeward bound. (Msg, VC 28-10-125, AFSSO SAC to AFSSO USAF, personal for Broadhurst from Harris, 28/1727Z Oct 62, Ex 7.) ~~(TS)~~ u

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professional who had learned to accept the risks of his profession. Anderson's colleague, Major Heyser, has emphasized: "It felt like, to begin with, that we had done this type of work so much that it was another day's activities, except you could hardly get away from the idea that it was considerably more important than a normal, routine day."<sup>62</sup> So Anderson left Florida that morning and over the eastern end of the island a projectile, presumably from a Soviet manned SAM site, exploded near his aircraft. Several small fragments penetrated the aircraft (causing explosive decompression), then ruptured his flying suit and entered his body. He died almost immediately from the decompression and crashed on the island somewhere in the Banes-Antilla area.<sup>63</sup> ~~(S)~~ u

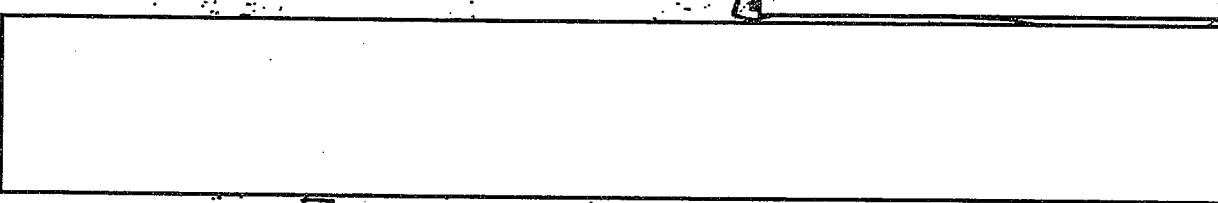
Major Anderson was the first and only combat casualty of the Cuban crisis. On 4 November, following United Nations and Swiss negotiations with Cuba, his body was returned to the United States.<sup>64</sup> Two days later he was buried with military honors in Greenville, South Carolina.<sup>65</sup> He received the Distinguished Service Medal, posthumously.<sup>66</sup> Perhaps his sacrifice was best summed up in the New York Times editorial of 7 November: (U)

Major Anderson and the thirty-four Americans who have been killed in the swamps and rice paddies and jungles of Vietnam are no less heroic than the men of the Argonne Forest, of Bastogne, of Iwo Jima. Indeed, their quiet courage -- the self-contained fortitude of men who serve in lonely and dangerous outposts unsupported by the cheers of the crowd -- represents even a higher valor than the shared trepidity of a nation at war. (U)

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Immediately upon confirmation of Anderson's loss, the JCS ordered a cessation of U-2 flights.<sup>67</sup> The question of why the hostile action against Anderson went undetected by U.S. radars inevitably arose. Although the Secretary of Defense had been told that the U-2s were covered throughout their flights, in fact they were not. Only height finding radars had the ability to track the aircraft, and they were being used for more "specialized work" on 27 October.



58 (TS) See INC. letter  
DO not release through

Radar surveillance and flight following from Key West Naval Air Station and Guantanamo Naval Base was the task of CINCLANT.<sup>69</sup> Before the first U-2 flight, SAC had requested and had been assured of CINCLANT support within the capabilities of his radars.<sup>70</sup> The SAC also sent a liaison officer to Key West to assist the Air Reconnaissance Control Center there in flight following and warning in case of hostile action against the U-2. He was recalled on 22 October, however, because the Center could not provide the service.\*<sup>71</sup> On the day of the fatal mission both Key West and Guantanamo reported they were fulfilling

\* The CINCONAD later said his FPS-6 height finding radar at Key West could track Brass Knob flights within 218 nautical miles of Key West at 100,000 feet, but it could not flight follow. Tracking means maintenance of continuous position data by radar. Flight following means tracking plus surveillance of the vicinity so friendly aircraft can be warned of a hostile act. (Msg, COOP-PTS 508, CINCONAD to JCS, for DOCOR (SAC), 1/2232Z Nov 62, B-89600.) (TS)

their commitments under Operations Order 29-62 within the limits of their radars, which, as it turned out, proved inadequate.<sup>72</sup>

~~(TS) *States mission of three locations,*~~

The JCS ordered a tightening of protective measures for U-2 flights.

The SAC was to position its R-47 ELINT aircraft on a track paralleling as far as possible the U-2 track, but no closer than 50 nautical miles from the nearest SAM site. The CINCLANT would place an aircraft in a position to gain information on Cuban air defense reaction to U-2 flights and would assign ships to fill the radar gaps between Key West and Guantanamo. He was also ordered to be prepared to retaliate against defense installations when directed from the national level.<sup>73</sup>

The CINCLANT Operations Order 17-62, 2 November, spelled out in more detail responsibilities for protection of future flights.<sup>74</sup>

~~(TS) *Protect against Cuba*~~

Permission from JCS to resume U-2 operations in support of operations in the Pacific, the United Kingdom, and Alaska came on the last two days of October,<sup>75</sup> but although SAC planned five Cuban missions for 1 November,<sup>76</sup> they were not approved.<sup>77</sup>

~~(TS) *Under TACCO*~~

Meanwhile, the Cuban crisis had taken a new turn and the world breathed an almost audible sigh of relief. On the very day U-2 missions were cancelled Premier Khrushchev notified President Kennedy that he was ceasing work on Cuban sites, dismantling his weapons, and preparing to return them to the Soviet Union.<sup>78</sup> The objective now was to ascertain to what degree the Premier was keeping his word. (U)

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The JCS ordered a single mission flown on 3 November along the northern coast: the aircraft was to stay at least five miles off shore and photograph the ports of Havana, Mariel, Punta Geraldo, Matanzas, Cardenas, La Isabela, Caibarien, and Banes.<sup>79</sup> Precautions taken included maximum flight following and warning within the limits of Key West, Guantanamo, and Navy picket ships; and fighter and search and rescue support.<sup>80</sup> At 1528Z, 3 November, Captain Robert Spencer left McCoy for a four hour mission. There were no incidents.\* He reported 70 per cent coverage of his port targets.<sup>81</sup> (TS) *u*

The next day SAC put five U-2s over Cuba, a concentration matched up to that time only by the mission of 17 October. Routes covered the whole island with emphasis on ports, missile sites, and routes from the sites to the ports.<sup>82</sup> Coverage was estimated at not more than 50 per cent, however, due to weather. One pilot got nothing when his C camera configuration malfunctioned.<sup>83</sup> This was the second failure in as many attempts with this equipment, and it was not used again. Flights on 5 November concentrated on those portions of western Cuba obscured the previous day, but the eastern portion was still undercast.<sup>84</sup> The missions of 6 November returned to that area.<sup>85</sup> (TS) *u*

\* It is interesting to note that prior to the mission the Defense Intelligence Agency made a "judgment" that it was ". . . highly unlikely that surface to air missiles will be fired against your aircraft." This was probably of only slight consolation to the first U-2 pilot to return to Cuba since 27 October, but it proved to be correct. (Msg, JCS 3209-62, JCS to AFSSO SAC, 3/0515Z Nov 62.) (TS) *u*

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19

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Brass Knob missions, although hampered by weather, continued throughout November. The U-2s flew 71 missions during the month for 356:35 hours, with only two air aborts, both on 13 November. The 4080th SW flew from one to five missions on all but five days during the month.<sup>86</sup> As previously mentioned, primary targets early in the month were missile sites and ports; with SAM sites, airfield activity, and new construction of roads and storage areas having only slightly less priority. By 10 November high and low altitude photography had confirmed that all six MRBM and three IRBM sites had been dismantled.<sup>87</sup> Also, photos of missile launchers stowed on the decks of ships in ports, and later visual confirmation by U.S. naval vessels at sea, confirmed that 42 Soviet MRBMs previously identified in Cuba had left.\*<sup>88</sup> ~~(S)~~ u

This ended the immediate problem, but the Soviets continued to assemble their Il-28 jet bombers. The agreement of Premier Khrushchev on 28 October to withdraw all offensive weapons from Cuba was interpreted by the U.S. to mean the Beagles as well as the missiles. But it was not until 20 November, after lengthy negotiations, that the Soviet leader agreed to remove bombers.<sup>89</sup> Until they were on the high seas, reconnaissance aircraft watched them closely. (U)

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\* No IRBMs were ever identified in Cuba; intelligence believes they were on board ships bound for Cuba which turned back when faced with the quarantine by the U.S. (Briefing, "Cuban Threat Developments," presented to SAC Historical Staff by Capt R. C. Hicks, DIET, 22 Jan 63.) ~~(S)~~ u

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20

With confirmation that Khrushchev would remove his bombers, the President immediately lifted the U.S. quarantine.<sup>90</sup> This action marked the beginning of a return to normal operations for forces involved in the Cuban buildup.\* Photo reconnaissance missions for SAC did not end, however, although they were scaled down. The JCS directed daily flights over key targets, but not more than two a day, and coverage of the entire island once a month. The Defense Intelligence Agency provided the objectives, priority, and frequency of coverage. The SAC executed the mission at its discretion.<sup>91</sup> The 4080th's Operating Location X was also closed out at McCoy and the U-2s, crews, and support personnel returned to Laughlin. Beginning on 24 November flights originated and terminated at the Texas base.<sup>92</sup> Low level reconnaissance, however, was placed on a standby alert basis on 21 November.<sup>93</sup> Although CINCLANT reasoned that a combination of high and low surveillance would best satisfy requirements,<sup>94</sup> and the JCS agreed, "overriding political reasons" dictated their cessation.<sup>95</sup> Thus, the lifting of the quarantine meant that the immediate threat to hemispheric peace had been solved to the President's satisfaction, but routine surveillance would continue indefinitely to insure they were not clandestinely returned. (TS) 4

Before concluding this discussion of SAC's reconnaissance activities during the Cuban crisis, it will be necessary to return briefly to the early days of the quarantine for a description of the special sea search mission. Because it is neither "fish nor fowl" the historian encountered some difficulty in integrating this material. He chose the expedient of discussing it last. (U)

\* See section on bomber and tanker operations, this history.

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21

## Sea Search

With the quarantine of Cuba imposed by President Kennedy at 1000 hours Eastern Standard Time (1400Z), 24 October, a huge armada of ships took up stations to block the arrival of further shipments of offensive weapons to Cuban ports. In overall command of the operation was Admiral Robert L. Dennison, Commander-in-Chief, Atlantic (CINCLANT). He asked the Air Force to help locate and identify shipping.<sup>96</sup> (U)

General LeMay immediately offered Air Force assistance in the shipping surveillance, and CINCLANT replied with a definite request. He asked SAC to search an area in mid-Atlantic bounded by  $30^{\circ}\text{N}$   $60^{\circ}\text{W}$  to  $38^{\circ}\text{N}$   $35^{\circ}\text{W}$  to  $25^{\circ}\text{N}$   $40^{\circ}\text{W}$  to  $23^{\circ}\text{N}$   $60^{\circ}\text{W}$  to origin. The CINCLANT required name and position of all merchant ships in this area and their course and speed.<sup>97</sup> Upon receipt of this requirement, SAC's Director of Operations, Major General K. K. Compton, directed his operations staff to begin planning a one-time surveillance mission, nickname Blue Banner. (s) u

Initial work was completed late on 24 October. Orders to prepare for the mission went to the 303rd Air Refueling Squadron (ARS), Kindley AFB, Bermuda; Lajes Task Force (98th ARS, Lincoln AFB, Nebraska), Azores; and the 55th Strategic Reconnaissance Wing (SRW), Forbes AFB, Kansas. The 303rd, part of the 4050th Air Refueling Wing, Westover AFB, Massachusetts, and stationed in Bermuda to provide refueling for Reflex B-47 aircraft, was to launch seven KC-97s the

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following morning (25 October, 0700Z) for a 13 hour search covering the eastern portion of the area identified above. The Lajes Task Force was to launch nine tankers, also early on the 25th. In case subsequent missions were requested, the 55th SRW was to be prepared to fulfill them.<sup>98</sup> ~~(S)~~ **u**

Search aircraft of the two tanker squadrons took off with full fuel loads early on the 25th as directed. Sightings (name of ship, time of sighting, position and course, estimated speed, and information on any unusual deck loads) were radioed to SAC Headquarters by Short Order and Fast Talk communications systems\* and from there relayed to the Navy.<sup>99</sup> Shortly after the Kindley and Lajes aircraft had become airborne, USAF contacted the SAC battle staff and requested cameras be used on Blue Banner aircraft to get a photographic record of sightings.<sup>100</sup> No cameras or film were available at either station, but the SAC Directorate of Materiel's Supply Division obtained 200 rolls of film from Rome Air Materiel Area and 24 K-20 cameras from Mobile Air Materiel Area and shipped them by KC-97 to Lajes and Kindley.<sup>101</sup> They were not used, however, because no further missions were required of the refueling units. The nine KC-97s of the 98th ARS logged 104:10 hours in the Blue Banner sea search; two local flights

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\* The Short Order system is a SAC tactical high frequency air to ground single sideband system which provides positive control of the SAC force. It is a high power tactical voice system. In general, the Fast Talk system is a SAC high frequency single sideband radio system providing the alternate means of command and control in event land line communications fail. (U)

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totaling just over seven hours were also made. From Bermuda, the seven aircraft of the 303rd ARS were airborne about 11:45 minutes each.<sup>102</sup>

(S) (U)

Preparations for the use of R-47 aircraft in sea search missions also continued during the early hours of 25 October. Shortly before midnight five tankers had left Forbes for Kindley, there to be prepared for refueling the jets during their search missions.<sup>103</sup> Five R-47s left Forbes shortly after dawn local time (1100Z). Their mission consisted of a flight from the home base to an area near Bermuda for refueling, then search in assigned areas east and south of the island, another refueling, and return to Forbes. Each carried a second navigator to act as an observer and to relay ship locations to SAC. When an aircraft made a sighting, either visually or by radar, it descended to about 5,000 feet to take photographs and to determine name and registry. Reports were passed to SAC by radio. Film was flown to Offutt AFB for processing and hence to Washington where it was put into the hands of the National Photographic Interpretation Center. Four of the five aircraft returned to Forbes after a 15 hour mission. One had to land at Kindley because of a radio malfunction.<sup>104</sup>

(S) (U)

Strategic Air Command's assistance in the aerial surveillance of shipping was not to be completed with the one day search. Shortly before noon on the 25th, CINCLANT requested another mission the next day in the same area.<sup>105</sup> A JCS message on the same day said SAC should be ready to continue these missions -- the intimation was indefinitely.<sup>106</sup>

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Again on the 26th five R-47s left Forbes at dawn on the same routes and were refueled from tankers out of Kindley. Only one returned to the home base, however; the other three had equipment malfunctions and one missed its second refueling due to bad weather. These landed at Kindley, but returned to Kansas the next day.<sup>107</sup> (S) u

In addition to the general shipping surveillance on 26 October, at the request of CINCLANT the 55th SRW sent five more R-47s\* to seek a particular ship, the Soviet tanker Grozny (nickname of the mission was Baby Bonnet).<sup>108</sup> The ship had last been sighted at  $25^{\circ}10'N$ ,  $51^{\circ}40'W$  the day before and heading in a track of  $260^{\circ}$ . One aircraft at a time, after refueling, flew a general orbital search pattern. About every three hours a new R-47 took up the search.<sup>109</sup> All landed at Kindley after the mission. This tactic failed to locate the Grozny on 26 October, so the following day five specific routes were planned.<sup>110</sup> The next morning, after two R-47s had launched successfully, the third crashed while leaving Kindley, killing all four crewmen aboard.<sup>111</sup> (S) u

Ironically, about an hour and a half after the fatal accident, at 1200Z, an R-47 piloted by Captain Joseph E. Carney located the Grozny at  $23^{\circ}50'N$ ,  $61^{\circ}10'W$ . After making positive identification, he made passes at the ship at all angles, photographing it. He remained circling the target for over two hours while a USN destroyer approached

\* Four went direct from Forbes to the search area; one, the aircraft which had the radio malfunction the day before, flew from Kindley. (S) u

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the area. When the Navy contacted the ship, the R-47 returned to Kindley where his cameras were unloaded and the film flown to SAC Headquarters for processing.<sup>112</sup> The JCS reported later in the day that surface ships were following the Grozny, but out of sight.<sup>113</sup> (S) (U)

Immediately upon completion of this task SAC terminated the mission and all six R-47s remaining at Kindley and their support tankers and maintenance personnel returned to Forbes. They had arrived at home station by 0250Z, 29 October.<sup>114</sup> To satisfy any future requirements by CINCLANT, however, 2 R-47s and 2 KC-97s were kept ready at Forbes for about another month.<sup>115</sup> The USAF officially relieved SAC of contingency requirements for shipping surveillance on 29 November.<sup>116</sup> (S) (U)

In delineating the scope of this history the date 27 November, the day SAC returned to a normal Defcon 4 state of readiness, has been selected as the conclusion of this command's activities in the Cuban crisis, and this history, except for minor instances, ends there. Reconnaissance activities after that date will be covered in the regular SAC semi-annual command history. (S) (U)

#### Summary

It would be difficult for anyone investigating the Cuban crisis to underestimate the importance of the role reconnaissance played in it.\*

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\* It is not the intent of this history to slight the low level reconnaissance efforts of the Tactical Air Command and the United States Navy during the crisis, but because this is a history of SAC's role in the crisis, activities of other commands can be mentioned only incidental to the SAC effort. (U)

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President Kennedy has said reconnaissance pilots ". . . contributed as much to the security of the United States as any . . . group of men in our history."<sup>117</sup> The Air Force Chief of Staff has listed as one of the five outstanding lessons of Cuba the need for modern long range reconnaissance capabilities.<sup>118</sup> The little publicized, but very valuable, electronic intelligence flights by R-47 aircraft began in mid-September

After notification in mid-October that responsibility for high altitude photographic surveillance had been transferred to the military and would be performed by SAC, this command was able to begin missions over Cuba on short notice, principally because of the 4080th Strategic Wing's long experience in similar missions from operating locations throughout the world. Controlling the operation was a tight knit organization stretching from the Joint Reconnaissance Center in the Department of Defense, who established mission objectives; to the SAC Reconnaissance Center in the Directorate of Operations, who planned the mission and ordered its execution; to the 4080th's Operating Location X at McCoy AFB, Florida, whose personnel flew the mission and maintained the aircraft. (TS) *ELINT refs.*

The U-2s and their systems proved extremely reliable, attesting to the skill of maintenance support personnel. Between 14 October and 30 November the 4080th flew 91 sorties (not counting the fatal 27 October mission) over Cuba for 402:52 hours.<sup>119</sup> Only two air aborts occurred during this period; there were five malfunctions of the camera system (three B system and two C system) and two failures of the ELINT

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(b) (3)-50 USC 403  
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equipment (System III).<sup>120</sup> Of the performance of the pilots, President Kennedy personally told them " . . . gentlemen . . . you take excellent pictures, . . . beginning with the photographs which were taken on the weekend in the middle of October which first gave us conclusive proof of the buildup of offensive weapons in Cuba."<sup>121</sup> For "meritorious achievement," on 24 November the 4080th Strategic Wing received its first oak leaf cluster to the Air Force Outstanding Unit Award.<sup>122</sup> Four days later 10 SAC U-2 pilots,\* who, according to their citation "distinguished themselves by heroism and extraordinary achievement in a duty of great responsibility from 14 October to 29 October," received the Distinguished Flying Cross from General Power at Headquarters SAC.<sup>123</sup> (S)

And yet the skill with which the reconnaissance pilots completed their missions would have been largely wasted if the organization for quickly processing and delivering the intelligence they had gathered to the highest levels of government had not existed. The processing of raw data in the form of exposed camera film and [ ] from ELINT [ ] although more prosaic, was as vital to the reconnaissance effort as flying the mission. The Cuban crisis was a classic example of a fast developing military situation in which intelligence of enemy actions had to be quickly processed, interpreted, and the results

\* They were: Major Edwin G. Emerling, Major Buddy L. Brown, Major Richard S. Heyser, Major James A. Qualls, Captain Roger A. Herman, Captain George M. Bull, Captain Charles W. Kern, Captain Gerald E. McIlmoyle, Captain Robert L. Primrose, and Captain Daniel W. Schmarr. (U)

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delivered to decision-making officials in time for them to act on it. The Undersecretary of the Air Force, Dr. Joseph V. Charyk, gave SAC the responsibility for supervising the delivery and processing of all original film from the U-2 missions.<sup>124</sup> ~~(S)~~ u

When the U-2 aircraft landed at McCoy, a courier was waiting to fly the B configuration film to one of five processing centers used during October and November: the Navy Photographic and Interpretation Center, Washington, D. C.; the 6594th Aerospace Test Squadron (AFSPL), Westover AFB, Massachusetts; Eastman Kodak Company, Rochester, N. Y.; the 4080th Strategic Wing, Laughlin AFB, Texas; and the 15th Reconnaissance Technical Squadron, March AFB, California. After processing, the film was again flown to the National Photographic Interpretation Center, Washington, D. C., where it was interpreted and prints made for use by government officials. The U-2's tracker film went from McCoy to Offutt AFB for processing during the entire period of the crisis. It was important that the tracker film be speedily processed and sent to the Interpretation Center in time for use in the readout of the B configuration film because it was a record of the aircraft's flight path.<sup>125</sup> ~~(S)~~ u

During early photographic operations, prior to 3 November, there was a broad distribution of prints and additional copies of U-2 film, but beginning on that date film began to be handled by priority. Priority 1 went to processing of film for use by the Interpretation Center and eventually by government officials. Priority 2 was given to processing film for Center use in satisfying other command requirements.

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29

Between 14 October and 24 November 289,560 feet of film was exposed on U-2 flights. <sup>126</sup> (S) (U)

The significance of the U-2 film has already been discussed. Five processing centers were involved in preparing it and SAC courier aircraft maintained a nationwide pickup and delivery service. According to the SAC Director of Intelligence, Brigadier General Robert N. Smith, the system worked well. But he believed the Air Force must continue to modernize its intelligence processing equipment. Speed and sophistication in the gathering system was of little use if the processing equipment could not match its modernity. Also, it was necessary to maintain a redundancy in this type of equipment during normal times, despite higher costs so that the increased demands of a time of crisis, like Cuba, could be met. <sup>127</sup> (S) (U)

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Chapter II.

BOMBER AND TANKER OPERATIONS

On 16 October, two days after a SAC pilot obtained the first conclusive photographic proof of the existence of Soviet offensive missiles in Cuba, General Power attended a meeting of the Joint Chiefs of Staff (JCS). He then recommended that SAC immediately increase its readiness in three ways: generate all command forces ~~through~~ declaration of Defense Condition (Defcon) 2, initiate B-47 dispersal plans, and mount an airborne alert.<sup>1</sup> All three actions were subsequently approved and effected. However, SAC's buildup to an unprecedented position of readiness did not begin immediately. Aside from reconnaissance activities, the command's initial force deployment during the Cuban crisis involved withdrawal from three Florida bases. Two of these, McCoy and Homestead, were SAC installations; and the third, MacDill, was assigned to Tactical Air Command (TAC). Evacuation of SAC units from the three bases became necessary as facilities gradually were saturated with other military forces during the preliminary stages of contingency operations. ~~(TS)~~ 4

Florida Evacuation

Strategic Air Command was thoroughly familiar with TAC requirements at the three Florida bases in support of Commander in Chief, Atlantic (CINCLANT) Cuban contingency plans. Necessity for complete withdrawal of its forces, as envisioned in contingency plans, had never

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been completely accepted by SAC. Tactical Air Command was in fact revising its plans when the Cuban situation became a crisis.<sup>2</sup> (S) u

On 12 October, Brigadier General W. J. Crumm, Chief of SAC Operations Plans Division, directed development of an evacuation plan for Homestead, MacDill, and McCoy. This plan was completed on 16 October, and approved by General Power the following day.<sup>3</sup> Actually, two evacuation plans were drawn up. The first assumed alert forces would remain at home, and the second called for evacuation of all SAC tactical aircraft. On 18 October, at Major General K. K. Compton's (Director of Operations) direction, SAC provided concerned units with these planning factors for aircraft movement if necessitated by "weather or other contingency requirements."<sup>4</sup> (S) u

Meanwhile, air defense requirements in the Florida area became as urgent as the tactical military buildup. On 19 October, SAC assured the JCS and Commander in Chief, Continental Air Defense Command (CINCONAD), that it would provide facilities at Homestead and McCoy needed to improve air defense in the Florida Military Emergency Zone (MEZ).<sup>5</sup> Later the same day, as the influx of TAC, ADC, and army units increased, General Power ordered immediate execution of evacuation plan one -- involving non-alert tactical aircraft at Homestead, MacDill, and McCoy.<sup>6</sup> (S) u

Strategic Air Command directed these aircraft to deploy as individual flights as soon as generated, and imposed a continuous work schedule until all movements were completed.<sup>7</sup> [ b1 ]

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[ b1 ] By 21 October, 33 bombers and 7 tankers had reached their deployment bases\* [ b1 ] (although non-alert).<sup>8</sup> Only SAC's alert forces remained at the Florida bases, but even their position was not inviolate. ~~(TS)~~ **u**

As the military buildup in the southeastern United States continued unabated over the weekend, General Power ordered evacuation of alert forces from Homestead and MacDill on 22 October, and from McCoy on 24 October.<sup>9</sup> The command had previously assigned the nickname Riders Up to the Florida base evacuation, and concurrently established two options for execution of evacuation plan two. Timing of option one, code name Gay Crowd, presumed an orderly flow; while option two, code name Crisp Bacon, was based on fast reaction time.<sup>10</sup> Option one timing was used for evacuation of alert forces from the three bases.\*<sup>11</sup> ~~(TS)~~ **u**

The Florida base evacuation reached its logical conclusion on 24 October, when USAF placed Homestead and McCoy under the operational

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\* These aircraft deployed to the following bases:  
 3 B-52D from McCoy (4047SW) to Turner AFB, Ga.  
 2 B-52D from McCoy (4047SW) to Sheppard AFB, Tex.  
 26 B-47E from MacDill (306BW) to Hunter AFB, Ga.  
 2 B-52H from Homestead (19BW) to Wurtsmith AFB, Mich.  
 7 KC-135 from Homestead (407ARS) to Bergstrom AFB, Tex.  
 (The two KC-135s assigned to the 306ARS were not sent to Loring AFB, Maine, until 24 October.) ~~(TS)~~ **u**

\*\* These alert forces generally deployed to the same bases as the unit's non-alert aircraft. However, alert tankers of the 407ARS went to Seymour Johnson; and the alert B-52s of the 4047SW, whose bombers were already split between Sheppard and Turner, deployed to Turner. ~~(TS)~~ **u**

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33

control of Commander in Chief, Air Forces Atlantic (CINCAFLANT) (Commander, TAC).<sup>12</sup> The only SAC unit in Florida which was undisturbed by the military buildup was the 4135th Strategic Wing, a tenant at Eglin AFB. Another SAC installation, Ramey AFB, Puerto Rico, was also utilized extensively by other forces during the Cuban crisis, but although SAC alerted its Ramey units to prepare for deployment, actual evacuation did not prove necessary.<sup>13</sup> (S) u

Selection of deployment bases for Florida units had been predicated upon maintaining EWO capability with minimum disruption.<sup>14</sup> Consequently, evacuation did not seriously degrade SAC's EWO capability except during actual alert force deployment and reconfiguration. In fact, command readiness was enhanced when the initially evacuated non-alert strike aircraft remained in EWO configuration at the deployment bases.<sup>15</sup> (S) u

#### Increased Readiness Posture

On Saturday, 20 October, two days before President Kennedy's address to the nation, General Power ordered the initial actions presaging attainment of an unprecedented level of strategic readiness. First was a directive to immediately reinstate all adjusted and degraded aircraft alert sorties. This was closely followed by an order to immediately reinstate all degraded missile alert sorties. The command specified that necessary actions in both aircraft and missile units would take precedence over all other activities.<sup>16</sup> Finally, SAC directed all B-52 units

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except those possessing H model aircraft\* to generate two bombers per squadron equivalent and place them on standby status. These aircraft would be available for ground alert duty if 1/8 airborne alert was directed and launched from the ground alert posture. Simultaneously, SAC directed affected KC-135 units to generate and maintain on standby status sufficient tankers to replace those alert KC-135s committed to support 1/8 airborne alert operations.<sup>17</sup> Command directives emphasized covert accomplishment, and cautioned that none of these actions constituted a change of Defcon.<sup>18</sup> (u) u

The pace of preparations leveled off slightly on Sunday. However, the SAC Inspector General recalled an airborne Eighth Air Force team scheduled to perform a unit inspection. Subsequently, all operational readiness inspections were cancelled. Major subordinate commands were also directed to initiate maximum security measures short of sabotage alert operations.<sup>19</sup> (u) u

President Kennedy addressed the nation on 22 October at 2300Z (1900 EDT). Several hours earlier, the JCS, accepting General Power's recommendations of 16 October, had directed SAC to initiate 1/8 airborne alert and to begin B-47 force dispersal.<sup>20</sup> General Power had immediately executed 1/8 airborne alert at 1700Z,<sup>21</sup> and medium force dispersal at

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\* On the following day, SAC levied this requirement upon one B-52H unit -- the 379BW. (Msg, Zippo 10-310, SAC to Alfa Two, 21/1825Z Oct 62, Ex 9 in TS Supplement to Hist of 379BW, Oct 62.) Other B-52H units could not initially participate because the Straight Pin modification program, to rework the wing terminal fitting on certain model B-52G and H aircraft to relieve stress corrosion, was still in progress. (u)

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35

1800Z.<sup>22</sup> Almost simultaneously, [the JCS declared that Defcon 3 would be established for U.S. forces world-wide at 2300Z, 22 October.<sup>23</sup> Thus, as the President delivered his "Report to the People," U.S. military forces assumed a Defcon 3 posture,] and the Strategic Air Command had begun to launch a significant B-52 airborne deterrent and to disperse its B-47 fleet.<sup>24</sup> The Strategic Air Command's readiness gave special significance to the President's statement that any hostile move would be met by "whatever action is needed."<sup>25</sup> ~~(ns)~~ 4

Actions to disperse the medium force and to launch an airborne alert represented adoption of two-thirds of the program recommended by General Power to the Joint Chiefs of Staff in mid-October. The third step was generation of all SAC forces. Late on 23 October, the JCS directed SAC to begin generation of its forces at 1400Z, 24 October. This involved establishment of [Defcon 2 for SAC forces and declaration of an A-hour,] both of which the command implemented at the time specified by the JCS.<sup>26</sup> ~~(ns)~~ 4

During this phase of the Cuban crisis, SAC remained in [a Defcon 3 status] for only 39 hours -- the period between the President's speech and imposition of the naval quarantine. Actually, the establishment [of Defcon 3] had little impact upon SAC because its major provisions had been previously enforced. The feature of [SAC Defcon 3 which most improved the command's readiness was the reinstatement of all degraded aircraft and missile alert sorties.<sup>27</sup>] This General Power had begun two days earlier. The JCS also initiated airborne alert and medium

UNCLASSIFIED

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36

dispersal while SAC was still officially in Defcon 4. Actual sequence of events during the Cuban crisis made Defcon 3 not only innocuous but transitory for the Strategic Air Command. Logically, the command's buildup culminated in generation of its forces; and this was a function of Defcon 2<sup>28</sup> ~~(to)~~ 4

The degree of readiness achieved by SAC during the Cuban crisis was unprecedented. Its forces had not been generated since the Lebanon crisis of 1958; and the Strategic Air Command had never launched a 1/8 air alert or dispersed the medium force. In view of the command's long-standing requirement for an airborne alert, the decision to initiate this program was particularly significant. ~~(to)~~ u

#### Airborne Alert

On 22 October, the JCS directed SAC to initiate airborne alert at the 1/8 level immediately, simultaneously specifying that it should be in full effect by the afternoon of the following day.<sup>29</sup> General Power immediately issued the execution order and established an implementation hour (1 hour) of 1700Z, 22 October.<sup>30</sup> The SAC directive for existing Chrome Dome air alert indoctrination included comprehensive instructions for advancement to the 1/16 or 1/8 levels. These procedures had been completely overhauled in early 1962 to facilitate rapid attainment of a full scale airborne alert. Basically, an expanded airborne alert rested upon the foundation provided by the indoctrination program. The route structure, tanker bases, and refueling areas remained unchanged.<sup>31</sup> ~~(to)~~ u

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37

The Chrome Dome indoctrination program consisted of 12 B-52 launches per day -- 4 on the southern route, 6 on the northern route, and 2 on the Thule Ballistic Missile Early Warning Site monitor route. Supporting KC-135 task forces were located in Spain, Alaska, and north-eastern United States. The Spanish task force provided two refuelings each for bombers on the southern route, the Alaskan and U.S. task forces each provided one refueling for northern route bombers, and the Alaskan task force additionally furnished one refueling for bombers on the Thule monitor route.<sup>32</sup> (S) u

Major considerations in expanding airborne alert were target coverage, bomber route spacing, and air refueling support. Because of fuel limitations at Eielson AFB, Alaska, the greatest increase in B-52 traffic occurred on the southern route. The number of tankers required at each task force increased as follows: Spanish task force (equally divided between Moron and Torrejon) from 6 to 38; Alaskan task force (Eielson) from 7 to 10; and northeastern United States (Westover, Griffiss, Loring) from 6 to 13.<sup>33</sup> Officers of the Strategic Air Command had previously coordinated the implications of an increased air alert with representatives of both the Canadian and Spanish governments. It was particularly important that Spanish authorities be promptly informed because of the very considerable increase in tanker and bomber activity in that area. Shortly after the decision to initiate 1/8 air alert, the JCS requested the Joint United States Military Advisory Group (JUSMAG) in Madrid to make "appropriate notification and coordination" with Spanish authorities.<sup>34</sup> (S) u

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Transition from the indoctrination level to a full scale airborne alert progressed rapidly and smoothly. Every B-52 unit was aware of its route assignment and the specific time it should launch into the stream. Initial launch into the northern route would come from the unit with the first assigned launch time subsequent to 1 hour plus 15 minutes. The first launch on the southern route was not scheduled until at least four hours and 30 minutes after 1 hour because additional time was required to bring the Spanish task force up to strength. With the 1 hour established at 1700Z, the 4134th Strategic Wing launched the first cell of B-52s on the northern route at 1824Z. Within 24 hours of 1 hour the required number of aircraft on the northern route were on their way; full status was reached on both routes within approximately 29 hours (2222Z, 23 October). Daily launches under the 1/8 program initially totaled 66 B-52s (28 on the northern route, 36 on the southern, and 2 on the Thule monitor).<sup>35</sup> ~~(S)~~ u

Augmentation of the tanker task forces also progressed on schedule. In fact, necessary KC-135s were already in place at 1 hour at both Eielson and the northeast U.S. task forces. Ten tankers were available at Eielson because KC-135s scheduled for redeployment had been detained; and the required 13 tankers were ready at the Griffiss/Loring/Westover complex.<sup>36</sup> Shortly after 1 hour, the first augmentation tankers departed U.S. bases for Spain. Before 1300Z, 23 October (1 plus 20), the required 36 KC-135s (19 each at Moron and Torrejon) were in place.<sup>37</sup> ~~(S)~~ u

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39

Strategic Air Command's plan for rapid attainment of an increased airborne alert was a good one. The only significant changes in force structure occurred because of the Straight Pin modification program and resultant aircraft shortages in B-52H units. Initially, the 379th Wing was the only H equipped unit committed to the 1/8 alert. This caused minor gaps in launch schedules and precluded assignment of the [BMEWS monitor program] to B-52H aircraft.\* (18) 4

As H model aircraft became available from modification centers, SAC assigned additional units to airborne alert. The command policy was that when a unit's inventory reached 11 aircraft, of which five had completed Straight Pin or were flyable, it would be required to fly one Chrome Dome sortie daily. On receipt of a sixth modified aircraft, two sorties would be required. The Strategic Air Command issued separate implementation orders for each individual sortie so added.<sup>38</sup> By 5 November, five B-52H units representing nine sorties had been integrated into the airborne alert. This brought the total number of daily air alert launches to 75.\*<sup>39</sup> (18) 4

At this point, 42 sorties flew the southern route, 31 the northern, and 2 monitored the [Thule BMEWS]. Refueling support was provided as

\* The plan for 1/8 posture required the 4133SW and 4136SW to assume the monitor task. However, G units retained the responsibility -- the 4039SW continued and the 42BW relieved the 4137SW. (18) 4

\*\* This total later reached 76 for the final three days of 1/8 airborne alert operations when a second sortie was required of the 4133SW. (Interview, Lynn Peake, Historian, with Maj C. L. Kimsey, DDO TO, Hq SAC, 5 Mar 63.) (18) 4

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follows: the Spanish task force provided two refuelings for each bomber on the southern route (84 KC-135 sorties daily); the northeast task force provided the first of two refuelings to bombers on the northern route (31 KC-135 sorties daily); and Eielson furnished the second refueling for northern route bombers, but on a one tanker to two receiver basis (16 KC-135 sorties daily). Additionally, Eielson furnished the Thule monitors with their single required refueling, which brought Eielson's total commitment to 18 tanker sorties daily. ~~(S)~~ u

As soon as 1/8 airborne alert posture was initiated, SAC placed primary emphasis upon maintaining the maximum number of sorties in the air. There were two major aspects of this program. One involved a slight relaxation of the stringent operating criteria applied to airborne alert at the indoctrination level; and the other was clarification of the relative priority of airborne alert over ground alert. ~~(S)~~ u

On 24 October, at General Compton's direction, SAC issued a waiver authorizing a B-52 sortie to continue with one engine shut down. Under certain conditions, F and G models and KC-135 aircraft could also proceed with low oil pressure on one or more engines. Numbered air force commanders could also authorize additional waivers as necessary to accomplish the mission.<sup>40</sup> Two days later, SAC headquarters authorized

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the use of manual over-ride and manual boom latching.\* However, it was emphasized that this waiver was granted only during 1/8 airborne alert operations [and Defcon 2] and only in event of a tanker or bomber malfunction.<sup>41</sup> (S) u

The relative priority which airborne alert maintained over both aircraft and weapons required considerable clarification. Since early 1962, when SAC reduced the time required to attain 1/16 or 1/8 air alert from 72 to approximately 2<sup>1/4</sup> hours, the command had authorized use of designated ground alert sorties if required to meet initial launch timing. Further degradation of the ground alert posture was not authorized except in those units which had insufficient weapons of the proper type and model. In such cases, SAC authorized weapon substitution on specified ground alert sorties to guarantee proper weapons for airborne alert sorties.<sup>42</sup> The goal always was to insure an effective air alert, but with minimal disruption of the ground alert target system. (S) u

On 23 October, SAC disseminated comprehensive guidance covering all situations where ground alert degradation might be required because

\* Manual over-ride and manual boom latching pertain to air refueling operations and both involve relaxation of peacetime safety standards for speed and mission effectiveness. In normal operation, there is an automatic disconnect if the relative position of the tanker and receiver places the boom at an unsafe angle. Manual over-ride eliminates this automatic feature and substitutes therefor the individual proficiency of the receiver pilot and boom operator, either of whom can disconnect manually. Manual boom latching puts the refueling operation completely in the hands of the receiver, as only he can effect a disconnect. (U)

UNCLASSIFIED

42

of weapon shortages, B-52 aircraft availability, and generation problems.<sup>43</sup> These instructions pertained to preparation of airborne alert sorties for launch, and specifically prohibited replacing an aborting Chrome Dome sortie from the ground alert force. However, on the following day, 24 October, the command decreed that airborne alert maintained an unqualified priority on aircraft and weapons.<sup>44</sup> Concurrently, General Compton directed that ground aborting Chrome Dome bombers be replaced from the ground alert, providing departure times could be met.<sup>45</sup> Subsequently, this policy was expanded to include replacing air aborts occurring shortly after takeoff.<sup>46</sup> ~~(S)~~ *u*

On 4 November, SAC further amplified its policies governing replacement of Chrome Dome B-52 aborts. Although primary emphasis remained on the airborne alert posture, SAC specified that neither the ground alert force nor the non-alert force should be degraded in configuration to deliberately provide a spare for airborne alert sorties. Any generated sortie capable of launching on time could be substituted for an aborting Chrome Dome bomber. At the same time, SAC authorized weapon substitutions on air alert sorties when a spare aircraft was launched.<sup>47</sup> ~~(S)~~ *u*

The problem of weapon substitution and attendant degradation of tactics was not serious for airborne alert because of its relative priority. However, it did affect the configuration of ground alert and non-alert sorties committed to the Single Integrated Operational Plan (SIOP). Although SAC had sufficient numbers of nuclear weapons, the

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43

command was short of the most advanced and versatile types. The ideal weapon was one which could be dropped from any altitude and possessed

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[ ] depending upon the situation. Unfortunately, SAC had no such weapon in its operational inventory at the beginning of the Cuban crisis. Although programmed for SIOP-63, this capability had been delayed by a combination of Atomic Energy Commission (AEC) production slippages and lack of approved safety rules. <sup>48</sup> ~~(TSND-NOTFORN)~~ (U)

Depending upon aircraft configuration and unit equipage, internal weapons for airborne alert bombers consisted generally of four Mark (MK) 28s or two MK 15/39s.\* [ ]

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[ ] Within these two major families, there were several models possessing varying capabilities and demanding alternate delivery modes. The MK 28Y1IN had an air and contact burst capability, but was a free-fall weapon requiring high altitude release. An improved version, the MK 28Y1RI, was a contact burst, maximum drogued (parachuted) weapon, which allowed delivery from 1,500 feet. A free-fall option could also be selected prior to launch. The more sophisticated [ ]

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[ ] However, SAC did not receive approved safety rules for maneuvering this weapon until early November. <sup>49</sup> The 4133d Strategic Wing, the first SAC unit to be equipped with the MK 28Y1FI, the most desirable weapon for

\* For internal and external weapons carried on airborne alert, see page 100a. (U)

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UNCLASSIFIED

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44

airborne alert was the MK 28YIRI; but SAC permitted use of the MK 28YLIN in some cases.<sup>51</sup> The most versatile member of the MK 15/39 family was the MK 39 Modification (Mod) 2, [ ] b(1) [ ] Other less sophisticated members of this family required release from a higher altitude.<sup>52</sup> (TSR) C

Another aspect of the weapons problem was that airborne alert was not specifically programmed in SIOP 63 or the basic SAC strike plan (50-63). Despite command support for a continuous airborne alert, it had never previously been authorized and it would have been unrealistic to include provisions for it in SIOP 63. Once airborne alert was authorized, a conflict of interest developed between it and the 50-63 EWO, particularly under a [Defcon 2 generation posture.] This applied to aircraft as well as weapons. The result was that a B-52 wing with 15 aircraft was committed to 15 SIOP sorties plus two on airborne alert. The priority afforded airborne alert reduced the number of B-52 aircraft available to the 50-63 EWO, and also caused substitution of weapons and tactics on additional sorties. (TS) C

For example, the 99th Wing, with 30 authorized aircraft, was committed to four sorties daily on Chrome Dome. This required eight aircraft (four airborne and four recovery sorties), each loaded with four MK 28YIRIs, the unit's primary weapon. These weapons were obtained from eight ground alert sorties, four of which were loaded with four

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MK 28LNs and four with two MK 39 Mod 2 weapons. In addition, one non-alert sortie was loaded with two MK 15 Mod 2 weapons because of a shortage of MK 39s.<sup>53</sup> This substitution of weapons on EWO targets required new target ballistics, modified and degraded tactics, and additional crew study. (SPPD) **u**

Authority to degrade specified sorties committed to the SIOP to insure an effective airborne alert did affect target coverage and damage expectancy. Reduced coverage resulted from non-availability of B-52 aircraft to support a specific sortie and from weapon substitution (both number and type). However, intelligence experts at SAC headquarters determined that damage expectancy of only 24 desired ground zeros (DGZ) dropped to an unacceptable level. To correct these deficiencies, the command assigned targets to spare Reflex and command support B-47s and placed them on alert.<sup>54</sup> (TS) **u**

After approximately two weeks of airborne alert operations at the 1/8 level, SAC emphasized the need for proper scheduling to balance the flying load throughout the B-52 fleet. The command suggested rotating non-alert aircraft into the Chrome Dome schedule initially, thus leaving the alert force intact insofar as possible. As alert force aircraft were rotated into the flying schedule, units were expected to expedite changeover and keep degradation to a minimum.<sup>55</sup> This aircraft rotation policy created further problems, particularly in units with a limited number of the primary weapons required for airborne alert. In many cases, rotation required downloading and uploading of weapons, thereby

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46

increasing demands upon loading teams and decreasing ground alert target coverage. The spectrum of problems associated with weapon availability emphasized the command requirement for a versatile nuclear weapon. ~~(b) u~~

Tanker task forces supporting airborne alert performed creditably during the Cuban crisis. The number of allocated tankers proved to be adequate except for the northeast task force. Early in November, as the number of daily B-52 launches reached its peak, Eighth Air Force asserted that a minimum of 17 KC-135s within the northeast task force was essential. The Eighth reported that poor weather over the entire area had occasionally dictated launching three tankers to provide two bombers with planned offload and still retain sufficient fuel for landing at an alternate base. Therefore, Eighth reasoned that four additional tankers were essential to insure effective bomber support during bad weather.<sup>56</sup> The Strategic Air Command replied that three additional tankers were justified, and authorized Eighth Air Force to increase immediately the northeast task force's resources to 16 KC-135s. This increased allocation put all three Chrome Dome task forces on essentially the same tanker sortie per day rate.<sup>57</sup> ~~(b) u~~

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For almost 30 days, the Strategic Air Command maintained an effective and secure airborne deterrent comprising 1/8 of its B-52 fleet.

At the direction of JCS, General Power terminated the 1/8 airborne alert posture effective 0600Z, 21 November; and SAC returned to its normal indoctrination program. The numbered air forces were authorized to recall support aircraft, personnel, and equipment at their discretion. However, SAC cautioned that no other posture degradation was authorized.<sup>61</sup>

(S) u

To reduce force degradation during period of recovery from 1/8 airborne alert, SAC established the following general guidelines: (S) u

1. Maximum ground alert posture was to be maintained. (S) u
2. B-52 sorties recovered from airborne alert which were unrefueled in EWO were to be reinstated to ground alert. (S) u
3. EWO refueled sorties were to be placed on ground alert as bomber/tanker pairs became available. (S) u
4. Number of aircraft previously authorized for training was unchanged.<sup>62</sup> (S) u

Concurrently with the return to indoctrination level Chrome Dome, SAC reinstated all operational limitations waived during the emergency.

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48

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These included the temporary policies governing engine loss, low oil pressure, priorities on aircraft and weapons, and use of manual override and manual boom latching.<sup>63</sup> (S) u

During the one-month operation, 2,088 B-52 aircraft were launched; airborne alert flying hours totaled 47,168. Maintenance support was over 97 per cent effective. The safety record maintained during this operation was outstanding: C b1

] <sup>64</sup> Of even greater significance was the secure, continuous, and immediate strike capability achieved by the program. While airborne alert operated at peak strength during the crisis, approximately 65 airborne B-52s and C b1 J were "target effective" at any given time.<sup>65</sup> (S) u

In view of warning deficiencies, existence of which had been highlighted by the Cuban missile threat, both General Power and General Compton have emphasized that the Strategic Air Command's only secure survivable forces were airborne alert aircraft. Although the immediate threat from Cuba was removed, General Power pointed out that the threat of missiles launched over the South Pole, from submarines, or from a satellite carrier vehicle remained. The command inventory of hardened missiles, which required no warning, was growing; but the requirement for a secure airborne alert continued because of the basic instability of the situation.<sup>66</sup> (S) u

During President Kennedy's visit to SAC headquarters on 7 December 1962, he presented General Power with a special flight safety

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49

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plaque. The President stated that this award paid "particular attention to the contribution of the Strategic Air Command during the most intense days of the Cuban Crisis."<sup>67</sup> In the more specific phraseology of the official citation accompanying the plaque, SAC received the award for "meritorious achievements in flight safety while performing a continual airborne alert during the Cuban crisis." It was further stated that "the airborne alert provided a strategic posture under which every United States force could operate with relative freedom of action." (U)

Medium Dispersal

Simultaneously with the directive to initiate 1/8 airborne alert, the JCS instructed SAC to implement dispersal plans for the B-47 force.<sup>68</sup> At 1800Z, 22 October, SAC ordered immediate generation and deployment of second cycle medium force dispersal sorties listed in EWO 44/50-63.<sup>69</sup> The affected force consisted of 183 B-47s assigned to 17 medium wings at 15 bases.<sup>70</sup> Strategic Air Command specified that [ ]

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as soon as possible after arrival at the dispersal bases.<sup>71</sup> (u)

Within two hours of execution, the first B-47 departed. All 183 dispersal aircraft had arrived at their destinations within 24 hours;

\* Sixteen of the dispersal sorties -- [ ] b1 [ ] - were not bomb carriers since the primary mission of the 301st and 376th Wings was ECM. (u)

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and all but one were generated and ready by 0600Z, 24 October.<sup>72</sup> Parent units almost exclusively utilized their own administrative support aircraft to transport personnel and equipment needed at the dispersal bases. Initially, 2,053 passengers and 323,240 pounds of cargo were airlifted to the dispersal sites.<sup>73</sup> (S) (U)

Some of the dispersal locations were active military installations, but most were civilian airfields whose only military association was with units of the Air National Guard or Air Force Reserve. Originally, SAC planned to use 34. However, Truax Field, Madison, Wisconsin, was deleted because of extensive ramp construction and inadequate runway load capacity. Aircraft of the 96th Wing scheduled for Truax were diverted to the unit's other dispersal bases -- Tinker and Tulsa.<sup>74</sup> One other dispersal site was occupied for only a few days. Because of inadequate facilities and security problems encountered at West Palm Beach, Florida, Eighth Air Force directed the 306th Wing to redeploy the three B-47s located there to Hurlburt Field, Florida. This reduced the number of B-47 dispersal bases in use to 32.<sup>75</sup> (S) (U)

Timely and efficient dispersal of the medium force was primarily the result of hard work and dedication at the unit level.\* Although SAC Headquarters expected no less, the command congratulated participating units for "the outstanding job done dispersing and regenerating

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\* The monthly histories of SAC B-47 units provide valuable first-hand information. The October 1962 history of the 306th Wing contains especially good coverage of dispersal activities. (U)

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the medium force."<sup>76</sup> However, as soon as dispersed B-47s were EWO configured, SAC concentrated upon such vital areas as command and control, security, personnel welfare, and logistic support. The requirement for reliable communications was paramount.\* Additionally, SAC strengthened existing safeguards against inadvertent or unauthorized launches by dispersed B-47 crews.<sup>77</sup> ~~(S)~~ u

Ground rules governing security at dispersal bases were gradually strengthened. On 23 October, SAC directed that alert areas at dispersal sites be roped off and posted with applicable restricted area signs.<sup>78</sup> Next day, SAC decreed that security at all sites, military as well as civilian, would be provided from command resources. In addition to point guards for each aircraft, close-in perimeter sentries were also required at civilian airports. Although security policies were strengthened, SAC lowered personnel skill level requirements, and allowed augmentation of combat defense forces with non-security personnel.<sup>79</sup> ~~(S)~~ u

Both SAC Headquarters and the numbered air forces conducted comprehensive staff visit programs, but the most significant security evaluations were those conducted by survey teams from Headquarters USAF. At General Power's request, the USAF Deputy Inspector General for Security established an inspection tour encompassing all SAC dispersal bases. By the end of October, these teams had visited 26 dispersal fields, and had rated security satisfactory or better at each one.<sup>80</sup> ~~(S)~~ u

\* SAC's efforts in this field are covered in the communications chapter of this history. (U)

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The most significant improvement in the EWO posture of the dispersed force involved upgrading selected B-47 sorties to first cycle status.

All dispersed B-47s were initially second cycle sorties. In an EWO situation, these bombers would be provided air refueling by tankers flying their second EWO mission. To improve the reaction capability of this force, SAC developed plans for upgrading 41 dispersed B-47s to first cycle status by utilizing 87 available KC-97s.<sup>81</sup> ~~(S)~~ U

All 41 sorties selected were located at airfields in the eastern United States. The major consideration in effecting the change was proper positioning of supporting tankers. Strategic Air Command decided to augment existing task forces with the following additional tankers: 41 at Goose, 34 at Harmon, and 12 at Lajes.<sup>82</sup> After furnishing units with a detailed listing of personnel and equipment required at the receiving task force base,<sup>83</sup> SAC ordered deployment of the additional KC-97s on 29 October. The command emphasized that required support personnel had to be on board deploying unit tankers, and authorized delay if necessary to assemble personnel.<sup>84</sup> ~~(S)~~ U

Aircraft movement began with the departure of the first tanker at 1800Z, 29 October. The majority of tankers were in place the following day, and deployment was completed on 1 November.<sup>85</sup> Official attainment of first cycle launch capability was predicated upon such factors as changes in combat mission folders\* and appropriate crew study as well

\* This also required authority to allow dispersed crews (first cycle only) access to CMFs for EWO study (Msg, Zippo 10-886, SAC to Alfa Two and Delta Two, 31/2045Z Oct 62). ~~(S)~~ U

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53

as generation of tankers at the task force bases.<sup>86</sup> By 31 October, 37 dispersed B-47s officially assumed a first cycle capability; three more did so on 1 November; and the forty-first and final one on 2 November.<sup>87</sup>

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Although these bombers and supporting tankers enjoyed first cycle status, they remained non-alert sorties because they were not subject to immediate launch. The Strategic Air Command established a communication and reaction time of one hour for the first cycle dispersed B-47s. Tanker sorties could be ground delayed as required to insure adequate off loads; however, to increase survivability, SAC suggested that the maximum tanker loiter time be computed.<sup>88</sup>

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This dispersal posture remained in effect until 15 November, when SAC initiated a [modified Defcon 2 posture.] At that time, 32 dispersed B-47s were degraded and recalled to SAC stations. This reduced the dispersed B-47 force to 151 (37 first cycle and 114 second cycle sorties), but all dispersal bases remained occupied.<sup>89</sup>

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On 24 November, the JCS authorized CINCSAC to terminate B-47 dispersal at his discretion.<sup>90</sup> Effective 1800Z on the same day, SAC directed return of the B-47 dispersed force and supporting tankers at Goose, Harmon, and Lajes. The JCS had not yet authorized the return to Florida bases, so the 306th Wing's B-47s deployed to Hunter. SAC delegated actual execution authority to the parent numbered air forces.<sup>91</sup>

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54

Dispersal of the medium force did not present any insoluble problems, but experience pinpointed areas where plans and procedures could be improved. Shortly after initial dispersal, SAC directed units to review and refine support plans while problems were fresh in the minds of participants. In particular, SAC stressed that support requirements and timing be clearly delineated and coordinated with host agencies.\*<sup>92</sup> (S) u

Although this was the first comprehensive medium dispersal operation, support bases had been periodically exercised under the Clutch Pedal program. Until early 1962, the command had been committed to exercising assigned dispersal bases with B-47 aircraft (minus nuclear weapons) every quarter. Because of the restrictive nature of the operation and its cost to the training program, SAC recommended to USAF that the requirement be deleted. In May 1962, USAF approved this request, and authorized quarterly surveys utilizing non-tactical aircraft.<sup>93</sup> (S) u

The Strategic Air Command had never been enthusiastic about medium force dispersal. If the command received only tactical warning of an impending attack, all efforts would be devoted to launching the alert force and preparing follow-on first cycle sorties. In such a situation, those aircraft sorties scheduled for dispersal were, in a sense, expendable. The advance warning received and preparation time available during the Cuban crisis permitted full exploitation of the defensive and offensive potential of B-47 dispersal. (S) u

\* On 31 October, General Power informed Hq USAF that host agencies -- including the Navy, ANG, AF Reserve, AFLC, MATS, TAC, ADC, Hq COMD, and CONAC -- were enthusiastically supporting medium dispersal (Ltr, Gen T. S. Power, CINCSAC, to Hq USAF, "Medium Force Dispersal," 31 Oct 62). (S) u

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55

Force Generation and Status (Defcon 2)

Late on 23 October, the JCS directed SAC to begin generation of its forces at 1400Z, 24 October (also the hour the naval quarantine became effective).<sup>94</sup> Since force generation was a function of Defcon 2, the command promptly established that posture and declared an A hour, for SAC forces only, of 1400Z, 24 October.<sup>95</sup> Approximately six hours in advance of A hour, SAC issued comprehensive guidance for assuming Defcon 2 posture to all units. The emphasis was upon covertly attaining the maximum state of readiness. But certain actions were deleted from this posture. Specifically, no EWO 44-63 deployments were accomplished, and no post-attack command control system (PACCS) aircraft were launched or dispersed.<sup>96</sup> Another exception was that high priority SAC reconnaissance operations were not curtailed.\* (→ 4)

The command also modified personnel policies outlined in [Defcon 2] functions. Personnel actions had been temporarily frozen and noncommissioned officer (NCO) academies and preparatory schools had been discontinued following [declaration of Defcon 3 on 22 October].<sup>97</sup> Upon assumption of [Defcon 2], SAC recalled personnel on leaves and passes, but not temporary duty (TDY) personnel required to support continuing operations. Neither was there a blanket recall of personnel attending schools.<sup>98</sup>

\* This included missions conducted under the following nicknames: Dominic, Box Top, Iron Work, Speedlight Delta, Straight Line, Brass Knob, Common Cause, Blue Ink, Quick Fox, and sampling sorties. (Msg, Zippo 10-402, SAC to November, 24/1222Z Oct 62.) (→ 4)

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56

Later the same day, the command ordered all officers attending Squadron Officers School to return to their home stations. Although the B-47 Combat Crew Training School (CCTS) continued operations, and its students remained in training, the B-52/KC-135 CCTS at Castle and Walker were suspended, and respective commanders determined the most effective utilization of students. Additionally, the temporary freeze on personnel actions was modified to allow certain TDY and permanent change of station (PCS) movements.<sup>99</sup> (U)

Force generation progressed rapidly and generally was ahead of published schedules. However, the command was already in a favorable readiness position at [A hour] because of such prior actions as evacuation of Florida bases, medium dispersal, and airborne alert. The following illustrates the growth in EWO-ready forces from [A hour through Force Generation Level (FGL) 24,] or 24 hours later:<sup>100</sup> (TS) 4

	<u>24/1400z Oct</u>	<u>25/1400Z Oct</u>
Bombers	912	1436
Missiles	134	145
Tankers	402	916 (TS) 4

Preparations were generally complete at FGL 24, except for some late generating B-58s, ICBMs, and spare B-47s.<sup>101</sup> (TS) 4

Initial guidance for [Defcon 2 posture] provided for the return of all excess aircraft at Reflex/Airmail bases.<sup>102</sup> Later the same day, General Power rescinded this policy and directed that spare B-47 aircraft be provided at all Reflex and Airmail locations (Morocco, Spain,

\* Lack of JCS safety rules for MK 53s delayed generation of last five B-58s; pods designed for MK 53s had to be modified for MK 39s (see Ex 21). (S) 4

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57

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United Kingdom, Guam, and Alaska). Spare aircraft were to be EWO configured and available to support any aborted sortie. Crew manning of spare aircraft in alert status was not initially required.<sup>103</sup> (s) C

However, SAC emphasis upon improving its overall EWO posture soon changed the function of these aircraft. Additionally, the command began developing EWO commitments for command support B-47s assigned to Sixteenth Air Force, Third Air Division, and Seventh Air Division.<sup>104</sup> By 29 October, SAC had assigned EWO sortie numbers to all command support B-47s and spare Reflex bombers in Europe and Africa, and had begun targeting actions.<sup>105</sup> Simultaneously, it began developing EWO assignments for spare Reflex and Airmail aircraft in Alaska and Guam, and also for three extra Reflex electronic countermeasures (ECM) B-47s in the United Kingdom.<sup>106</sup> (S) U

By 2 November, 30 spare Reflex/Airmail and command support B-47s had become EWO capable and officially assumed alert status. Broken down by geographical area, (b)(1)

Individual sorties had assumed alert duties beginning on 30 October. Although this group of B-47 aircraft was small in comparison to the number of additionally generated B-47s at ZI stations,<sup>111</sup> its forward location and EWO alert status made it a significant addition to SAC's immediate strike capability. (ms) (u)

Impact of force generation upon B-58 capability was especially pronounced. On 19 October, the Strategic Air Command had six B-58s

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on EWO alert.<sup>115</sup> By the first week of November, the number of generated B-58s had jumped to 84 aircraft.<sup>116</sup> Initially, a very limited number of B-58 sorties were supported by first cycle KC-135 tankers. By 1 November, SAC operations planners had determined that 20 additional B-58s could be launched in the first cycle by using available KC-135s.<sup>117</sup> After assuring the capability of task force bases to support additional tankers,<sup>118</sup> SAC directed 20 KC-135s to deploy to northern U.S. stations on 2 November.<sup>119</sup> All tankers were in position on the following day, and at 2000Z, 3 November, the 20 affected B-58 sorties officially advanced to first cycle status.<sup>120</sup> Four additional second cycle B-58s assumed a first cycle capability on 5 November.<sup>121</sup> First cycle B-58 sorties then totaled 41. ~~(S)~~ u

Strategic Air Command's immediate execution capability reached a high point during the first week of November. The following breakdown compares actual execution capability on 19 October (normal 50 per cent alert, less adjusted and degraded sorties and deviations) with that attained on 4 November: ~~(S)~~ u

	<u>19 Oct 62</u> <sup>122</sup>	<u>4 Nov 62</u> <sup>123</sup>
Strike Aircraft	652	1479
Missiles	112	182
Total Weapons	1422	2962
Tankers	358	1003

~~(S)~~ u

While SAC was in Defcon 2 posture, 92.5 per cent of its weapon systems were ready to launch within one hour. Sufficient tankers were not

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available to support remaining vehicles. Major General Compton attributed SAC's ability to maintain this capability throughout the crisis to the high degree of professionalism exhibited by its personnel. He also concluded that the Cuban crisis validated the command's efforts over the years to maintain a high state of readiness in its units.<sup>124</sup>

(TS) u

**Phasedown**

From the beginning of the crisis, Headquarters USAF was concerned about the ability of its forces to maintain an advanced readiness posture indefinitely.<sup>125</sup> On 24 October, but prior to establishment of Defcon 2, General Power reported to USAF that under current SAC posture no force degradation was anticipated for at least 30 days, but emphasized that no experience factors existed upon which to base forecasts of degradation.<sup>126</sup> (TS) u

After two weeks of experience, General Power determined that SAC could maintain its current readiness posture without change until 15 November. Further extension would degrade both combat crew proficiency and inventory. Consequently, on 6 November, the CINC informed the JCS that he planned to take the following actions effective 15 November:

(TS) u

- A. Maintain airborne alert at 1/8 strength. (TS) u
- B. Reserve Combat Crew Training School for B-52, B-58, and KC-135 crews. (TS) u

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60

C. Provide one crew proficiency sortie per month per combat crew. (S) u

D. Continue dispersal of sufficient first and second cycle B-17s to occupy all dispersal bases. (S) u

General Power concluded that these actions would result in minimal degradation of his strike capability, and that degraded weapons could be regenerated as provided for in normal SIOP timing. <sup>127</sup> (S) u

The JCS approved these proposals on 9 November, and SAC promptly informed its units.<sup>128</sup> The next day aircrew training priorities were established;<sup>129</sup> and, on 12 November, SAC furnished specific instructions for sortie degradation and aircraft distribution to support the altered EWO/training posture.<sup>130</sup> [Modified Defcon 2 went into effect at 1500Z, 15 November.]<sup>131</sup> At the same time, SAC authorized commanders to grant discretionary leaves, and resumed B-52 and KC-135 CCTS.<sup>132</sup> (S) u

Revocation of the quarantine order on 20 November precipitated further posture degradations. At the direction of the JCS, CINCSAC terminated 1/8 airborne alert at 0600Z, 21 November.<sup>133</sup> Later the same day, and in view of the decision to discontinue 1/8 airborne alert, General Power proposed to return the command to [Defcon 4] within two days.<sup>134</sup> Although the JCS disapproved reverting to [Defcon 4],<sup>135</sup> it did authorize an immediate return to [Defcon 3]. Effective 2330Z, 21 November, CINCSAC established [Defcon 3] with the following modifications:

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61

aircraft remained generated except for previously degraded sorties; dispersed medium force remained generated and in place; and current instructions for the missile force applied.<sup>136</sup> (TS) u

The next action in the phasedown sequence was recalling dispersed B-47s and the supporting tanker deployment. This was directed on 24 November.<sup>137</sup> Effective 2100Z on 26 November, SAC terminated extra B-47 Reflex and Airmail alert, command support alert, loaned B-47 aircraft, and B-47 generated reserve.<sup>138</sup> Finally, at 2310Z, 27 November, SAC returned to Defcon 4, its normal readiness posture.<sup>139</sup> (TS) u

Still unresolved was the return of SAC tactical aircraft to Florida bases. On 28 November, the JCS informed SAC that return movement of its evacuated forces was to be coordinated with departure of AFLANT forces.<sup>140</sup> On the following day, SAC authorized Eighth Air Force to redeploy evacuated aircraft, crews, and equipment to Homestead, MacDill, and McCoy. Actual movement required coordination with AFLANT forces and approval of SAC Headquarters.<sup>141</sup> (TS) u

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62

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### Chapter III

#### THE MISSILE ALERT

The Cuban crisis of 22 October-27 November was unique in the history of the Strategic Air Command. It afforded SAC an unprecedented opportunity to test its command and control apparatus as well as its force generation ability under stress. Thus, the task of bringing the ICBM force to alert provided the command a singular opportunity to determine exactly how far it had progressed toward an adequate missile capability. The results were encouraging. In addition to bringing a large number of ICBMs to alert condition, the command learned much about the entire alert process and the many problems connected with it. Through this experience, policies and procedures were changed or modified once it was determined they were lacking in some respect. *(u)*

By 19 October, SAC had 112 ICBMs on alert; this number included 77 Atlas D, E and F, and 35 Titan I.<sup>1</sup> On 22 October -- the day of President Kennedy's address to the nation outlining the crisis aspect of the Cuban situation -- the number of alert ICBMs had been increased to 132 (91 Atlas and 41 Titan I).<sup>2</sup> This command directed operational field units to reinstate all degraded missile alert sorties on 20 October. Reinstated ICBMs included all those adjusted or degraded for modifications. According to SAC, this action would take precedence over all other activities and be accomplished as covertly as possible. No missiles would remain in an Operational Readiness Training (ORT) configuration.<sup>3</sup> *(u)*

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63

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Additional Atlas F and Titan I missiles were prepared for alert status as soon as possible on 22 October. Atlas F ORT missiles would be readied as soon as liquid oxygen became available.<sup>4</sup> On the following day, SAC's October missile alert posture was amended to include 167 Atlas D, E, F, and Titan I missiles. Units were directed to bring the required ICBMs to alert immediately.<sup>5</sup> ~~(S)~~ u

The urgency SAC attached to placing missiles on alert was reflected on 21 October in an order to deviate from normal technical data procedures in bringing ICBMs to rapid readiness configuration. Units would not check out systems or verify readiness, except when needed for personnel or equipment safety.<sup>6</sup> This guidance was short lived, however; primarily because of safety considerations, it was rescinded three days later.<sup>7</sup> ~~(S)~~ u

One of the most critical elements in readying missiles for alert during 20-25 October was the availability of liquid oxygen (LOX). Although shakedown\* missiles had in the past used LOX, ORT missiles utilized liquid nitrogen. The problem, therefore, was in purging the ORT ICBMs of liquid nitrogen and converting to LOX. This process had sometimes taken as much as 72 hours. When conversion of ORT missiles to LOX for EWO configuration became imminent on 20 October, this command

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\* Maintenance program designed to correct incipient ICBM malfunctions. Shakedown consisted of two successful consecutive countdowns of propellant loadings and additional system checks required to verify subsystem operability. ~~(S)~~ u

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conducted a survey of commercial LOX facilities. It became obvious that SAC bases would not have enough LOX to convert all ICBMs. On 21 October, covert action was taken to convert missiles and to procure a large enough supply of LOX.<sup>8</sup> ~~(S)~~ u

Because covert procedures would have required approximately 12 days, a second overt plan was applied on 22 October which used routine resupply channels and the facilities of three field petroleum offices\* and the Middletown Air Materiel Area (AMA). A national priority for SAC was established with production from all commercial and government plants channeled in support of the project. Transportation was recalled and diverted to missile ORT bases. At 1300 hours, 25 October, an adequate supply of LOX had been delivered to the requisite bases.<sup>9</sup> ~~(S)~~ u

As a result of the above experience, on 14 November SAC directed that Atlas F and Titan I use LOX in all ORT/Shakedown exercises at operational sites.<sup>10</sup> This directive did not include ORT missiles at Vandenberg AFB. The use of LOX was a direct outgrowth of SAC's experience in the Cuban crisis while combining ORT with shakedown could be indirectly related to the crisis.<sup>11</sup> ~~(S)~~ u

With the Cuban situation building to a climax following President Kennedy's address of 22 October, this command invoked the Air Force Systems Command (AFSC)/SAC Agreement for Emergency Combat Capability (ECC)

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\* St. Louis, Houston, and Maywood.

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65

of Ballistic Missile Launch Complexes on 24 October (1630Z).<sup>12</sup> In general, the ECC Agreement contained provisions whereby SAC would assume operational control of all AFSC launch complexes in ECC status in the event of strategic warning. The ECC condition represented that status of a launch complex in which a missile could be launched on an EWO mission with strategic warning. The agreement stated that upon [declaration of a national emergency or Defense Condition (Defcon) 2 or higher,] all ECC complexes would be immediately readied for EWO firing. Thus, ECC complexes would be assigned to SAC for operational decisions and control.<sup>13</sup> (S) u

Immediately, AFSC -- with contractor aid -- began preparing ECC missiles for turnover at Vandenberg (Atlas F, Titan I, Minuteman); Walker (Atlas F); Dyess (Atlas F); and Plattsburgh (Atlas F). During the period of the Cuban crisis (22 October-27 November), the following ICEMs were either released to SAC by AFSC under the ECC agreement, were permanently accepted by SAC, or were generated and subsequently turned back by the command (all were initially scheduled for generation by AFSC):<sup>14</sup> (S) u

<u>Unit</u>	<u>Base</u>	<u>Missile</u>	<u>Number</u>
576 SMS	Vandenberg	Atlas E	1
576 SMS	Vandenberg	Atlas F	1
395 SMS	Vandenberg	Titan I	1
394 SMS	Vandenberg	Minuteman	6
341 SMW	Malmstrom	Minuteman	10
578 SMS	Dyess	Atlas F	1
579 SMS	Walker	Atlas F	6
556 SMS	Plattsburgh	Atlas F	10
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On 24 October, following initiation of the AFSC/SAC Agreement, this command directed immediate action to bring AFSC missiles to alert at Vandenberg (Atlas, Titan, Minuteman), Plattsburgh, Walker, Malmstrom, and Dyess AFB. Alert status would be accomplished in accordance with the AFSC/SAC Agreement, SAC Manual 55-7, and Ballistic Systems Division (BSD) plan "Golden Bull" which was the BSD portion implementing the AFSC/SAC agreement.<sup>15</sup> (BS) ! ! u

Indicative of the effort involved and its success, the following portrays the gradual SAC ICBM alert buildup and phasedown:<sup>16</sup> (BS) . . u

Missiles On Alert	Oct 22	Oct 24	Oct 26	Oct 28	Oct 30	Nov 1	Nov 3	Nov 5	Nov 15	Nov 20
Atlas	91	99	101	113	119	119	121	115	104	94
Titan I	41	48	51	54	53	56	53	55	54	48
Minuteman	0	0	0	4	9	8	8	6	8	8
Total	132	147	152	171	181	183	182	176	166	150

The maximum number of alert missiles reached 186 at 1400Z, 3 November.<sup>17</sup> From that point, the number was gradually reduced until on 29 November 130 ICBMs were in alert status.<sup>18</sup> This command and AFSC cooperated extremely well in the project. Emergency contractor coverage was effectively used by BSD. Technicians as well as installation and checkout contractors performed exceedingly well during the crisis.<sup>19</sup> A total of 201 SAC/AFSC missiles were available during 23 October-2 November. The

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\* It should be remembered that the number of alert missiles often fluctuated within any 24 hour period.

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67

in-commission rate for launch upon receipt of execution order reached a maximum of 92 per cent with an average of 89 per cent during the last four days of the period.<sup>20</sup> In commenting on the combined effort in bringing ICBM's to alert, General Thomas S. Power, CINCSAC, wrote to General Bernard A. Schriever, Commander, AFSC:<sup>21</sup> (S) u

The ICBM force generated by joint SAC/AFSC effort is an excellent example of our ability to attain and sustain a formidable missile capability. Especially noteworthy was BSD, Contractor and SAC's immediate response and ability to reach alert status in minimum time, as demonstrated by an average generation of 2.5 missiles per day. Positive action taken by your organizations in supporting the SAC mission is commendable. (S) u

Several special problems dictated an early return of ECC missiles to AFSC. Because the Cuban crisis broke during the installation and checkout phase of many ICBMs, prolonged missile alert meant that contractor personnel remained in place without performing any functions.\* This situation was, of course, very expensive in both time and money. In addition, installation and checkout, and the testing program fell further behind as missiles remained on alert. Further, training was impeded with the resultant impact upon operational crews scheduled for operational field units.<sup>22</sup> (S) u

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\* A total of 90 contractor personnel were involved in the Atlas E updating program (Project "Drawtite"). In addition, 250 personnel were included in Atlas F modifications ("Clean Sweep"), 125 located at both Schilling and Lincoln AFBs. (Interview, H. S. Wolk, Historian, with Capt O. J. Howells, DM4C1, 21 Nov 62.) (S) u

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68

On 29 October, Headquarters USAF directed SAC and AFSC to agree on a specific plan and date for bringing Operational Systems Test Facilities (OSTF) at Vandenberg AFB back to test status. It was also suggested that installation and checkout missiles be returned to AFSC. The major consideration, according to USAF, remained long range, i.e., completing missile complexes as rapidly as possible and turning them over to SAC for EWO operations.<sup>23</sup> (s) u

At the same time, BSD suggested to SAC the return of selected facilities on a priority basis. It recommended return of Minuteman test facilities at Vandenberg in order to resume testing "vital to the activation of the weapon system at operational sites."<sup>24</sup> It was pointed out by BSD that testing and validation of technical manuals directly supported operational deployment. Delays, according to BSD, could affect activation of operational missile units. Because operational readiness training was at a critical juncture, BSD also recommended return of three Vandenberg OSTF facilities, subject to SAC concurrence. Also included in the priority list were Atlas ECC sites at Vandenberg (OSTF), Walker, and Plattsburgh. Testing at Vandenberg was being postponed on a day-to-day basis while certain Walker and Plattsburgh sites had not yet accomplished a LOX countdown and thereby had delayed turnover to SAC. Three Titan launchers (395A one, two and three) at Vandenberg were also recommended for return to AFSC for Category II testing and updating.<sup>25</sup> (s) u

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69

Nevertheless, since SAC remained [in a Defcon 2 and the Cuban situation continued unsolved,] this command could not agree to the BSD suggestions until higher authority directed a reduction in alert status. However, it did agree to return Atlas OSIP-1 and OSIP-2 as well as one Minuteman launcher at Vandenberg (394 SMS, #6); and it consented to return R&D and I&C missiles upon establishment of a lower alert stance. Missiles at Vandenberg, Walker and Plattsburgh would be included in these categories.<sup>26</sup> (S) u

On 3 November, SAC released the following complexes to BSD for resumption of testing and I&C although the command remained [in Defcon 2:] Minuteman Vandenberg sites 1-5; Titan I Vandenberg site 395A1; Atlas F Walker sites 2, 5, 6 and 11; and Atlas F Plattsburgh sites 1, 7, 8 and 10. Coordination began with local Site Activation Task Forces (SATAF) with complexes returned upon SATAF's request. This command directed that all safety and maintenance practices be followed during downgrading of each alert missile.<sup>27</sup> Two days later, Atlas F Walker complexes 4, 7 and Plattsburgh Atlas F sites 4, 5, 6, 9 and 12 were released to BSD on a request basis. But the command reiterated that Project "Clean Sweep" could not start at Schilling and Lincoln AFBS until a reduction in alert status occurred.<sup>28</sup> (P) u

Following a decision by SAC directing resumption of Atlas E modifications through Project "Draw Tide," during which no more than one missile in each of the E squadrons would be off EWO at any one time,<sup>29</sup>

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UNCLASSIFIED - 2 -  
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70

CINCSAC ordered a reduction in the SAC EWO stance effective 15 November. This provided for a maximum of 20 ICBMs to be degraded for Atlas E modifications, "Clean Sweep," Atlas F ORT, and Titan I ORT.<sup>30</sup> (S) u

Coincident with the [modified Defcon 2 effective 15 November], the command made significant changes in ORT/Shakedown procedures. In the first place, shakedown would be conducted in conjunction with CRT for Atlas F missiles. This policy had previously been in effect for Titan I. By combining training and shakedown requirements in one facility, the need for taking two missiles off alert was reduced to only one ICBM being exercised at once. Thus, since an ICBM must be exercised in shakedown, the opportunity presented itself to combine ORT with the shakedown exercise. In addition, Atlas F ORT/Shakedown exercises would be accomplished with LOX instead of liquid nitrogen. This change evolved directly from the Cuban experience in which much time was spent converting ORT missiles from liquid nitrogen to LOX. Clearly, the need existed for rapid conversion of ORT sites to alert status. Both changes, therefore, were primarily dictated by the desire to avoid EWO degradation.<sup>31</sup> (S) u

As Atlas F CRT resumed on 15 November, then, one missile per squadron would be degraded from alert for ORT. With sites remaining in LOX configuration, shakedown would be held in conjunction with ORT. For purposes of CRT, a minimum of 10 propellant loading exercises would be conducted on each missile. Since shakedown called for two successful countdowns in a row, in the event these countdowns had not been

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71

accomplished after 10 exercises, ORT would continue until shakedown requirements were satisfied. After 10 training exercises on a given missile, however, it would be released for maintenance and returned to alert. At the same time, ORT/Shakedown would continue on another ICBM.<sup>32</sup> On 23 November, however, SAC modified its policy and approved continuing shakedown exercises on a missile until requirements were met, regardless of the number of exercises above the minimum of 10.<sup>33</sup> (S) u

Coincident with [the modified Defcon 2], SAC notified BSD of its concurrence with the "Clean Sweep" modification plan at Walker and Pittsburgh AFBs. The procedure called for Atlas F alert missiles to be degraded for modifications only after its replacement -- with "Clean Sweep" modifications completed -- had been brought to full EWO status. Thus, a new complex would be on alert before this command would turn another site back to BSD for modification.<sup>34</sup> (S) u

Following [the return to Defcon 4 on 27 November,] the command revised its missile alert stance to 147 ICBM alert sorties required. Command policy held that only one sortie per squadron would be down for modification ("Draw Tite" or "Clean Sweep").<sup>35</sup> (S) u

This command had maintained [its increased emergency ICBM alert posture from 20 October to 27 November.] From 112 alert missiles on 19 October, SAC reached a high of 186 EWO ICBMs on 3 November. However, as indicated previously, this was not accomplished without difficulty. (S) u

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The period of the Cuban crisis marked the first time on alert for a new generation of ICBMs -- the solid fuel Minuteman. On 27 October, the first two SM-80 ICBMs went on alert with the 341st SMW at Malmstrom AFB, Montana.<sup>36</sup> Almost two hours later, another Minuteman reached alert status with the 394th SMS at Vandenberg AFB.<sup>37</sup> Six SM-80s were on alert on 28 October, four with the 341st SMW and two at Vandenberg.<sup>38</sup> (S) u

However, rather than temporarily accepting Flight A Minuteman ICBMs at Malmstrom AFB (341st SMW) under the SAC/AFSC Agreement, the 341st inadvertently completely signed for the missiles, thereby irrevocably accepting them for this command prior to completion of all required contractor demonstrations.\* Flight A was turned over to SAC on 24 October and two days later the command requested that BSD conduct an immediate technical evaluation of the flight in order to ascertain the possibility of accidental launch since demonstration tests had not been performed. Even if no safety restrictions were needed in placing these missiles on alert, SAC desired a safety test by its personnel.<sup>39</sup> This command directed that while in Defcons 1, 2, and 3, SM-80 lid closure ordnance

\* According to the History of the 341st SMW, "the attempt by the Wing Commander to implement the AFSC/SAC agreement under Defcon 2 was refused by SATAF because AFSC was still in Defcon 3 . . . the only way the wing could comply with SAC . . . was to accept delivery of A Flight from SATAF, with exceptions and waivers to cover incomplete tests, demonstrations, and shortages." (History of 341st SMW and 341st CSG, 1-31 Oct 62, p 31) The fact still remained, however, that with SAC in Defcon 2, the AFSC/SAC Agreement for ECC could have been triggered with the 341st returning operational control of Flight A to the SATAF commander after reverting to Defcon 3 or less. (S) u

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73

would be disconnected and the safety control switch manually locked in the safety position. Only after receiving a launch execution order would silos be placed in immediate launch configuration.<sup>40</sup> (S) u

The BSD replied that a technical evaluation by the Minuteman System Program Office did not reveal any hazardous condition as far as strategic alert was concerned. Further, contractor demonstrations not accomplished were adequately covered by checkout tests, according to BSD, prior to turnover. Technical order procedures would be followed by SAC in achieving alert with no resultant system degradation in either launch ability or safety. Site Activation Task Force and contractor personnel continued to work with the 341st while additional safety precautions directed by SAC (see above) could also effectively be applied to the 394th SMS at Vandenberg.<sup>41</sup> As far as BSD was concerned, disconnecting the lid ordnance device and making the safety control switch safe by manual means was not necessary, based on BSD's technical evaluation.<sup>42</sup> (S) u

Rather than demonstrations being accomplished prior to alert then, these tests were completed in the process of bringing Flight A missiles to alert status by SAC, SATAF and BSD. The 3901st Strategic Missile Evaluation Squadron (SMES) conducted a survey of the 341st and found it operationally satisfactory, although its maintenance ability was rated marginal.\* The combat crews, which had completed individual training

\* The SMES report showed the following: Missile combat crews -- capable; procedures -- adequate; equipment -- limited, but ready; and technical data -- adequate. (S) u

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74

and ORT and passed the ORT standardization test, were judged capable. While procedures were adequate, they required refinement and improvement. In summary, although the 341st was in fact on strategic alert during the Cuban crisis, its ICBM's perhaps more nearly approached an ECC status.<sup>43</sup> (S) u

With a greater number of missiles on alert than would ordinarily have been the case, a strain was placed on SAC's combat ready missile crews, especially at bases where missile alert was greatly accelerated. The 556th SMS at Plattsburgh AFB became a case in point. This unit's capability would have been marginal even without a crisis situation. It became clear early in October that accelerated site turnover at Plattsburgh would mean degradation of alert sorties unless additional crews were dispatched to the 556th on temporary duty during the crisis period. The Second Air Force was alerted by SAC on 12 October that it might become necessary to send one or more Atlas F combat crews to the 556th between 29 October and 20 November.<sup>44</sup> (S) u

The situation at Plattsburgh built up rapidly, accelerating from two missiles and 22 combat ready crews (on waivers) on 22 October to 7 alert ICBMs with only 23 crews on 28 October. On 29 October, therefore, SAC directed four Second Air Force combat ready missile crews (two from Altus, two from Lincoln) to move on temporary duty to the 556th SMS. Four more crews moved to Plattsburgh on 1 November (again, two each from Altus and Lincoln AFBs) with the turnover of additional sites from ECC

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status. In order to perform necessary maintenance functions, a fully qualified, combat ready (non-waived) Atlas F instructor crew was ordered to the 556th from the 576th SMS at Vandenberg AFB on 1 November, making a total of nine crews augmenting the 556th. The mission of the Vandenberg crew at Plattsburgh included: (1) Coverage of consoles during maintenance requiring a fully combat ready crew; (2) Additional maintenance support as needed by the commander of the 556th; and (3) Conduct of all Phase II tasks (academic) for 556th crews not having completed Phase II ORT at Vandenberg AFB.<sup>45</sup> (S) u

The 576th combat ready crew would remain at Plattsburgh until relaxation of Defcon 2 in order to complete Phase II training for two 556th crews. The Vandenberg crew would not perform normal alert tours, but would be used as needed to cover maintenance problems on SAC-owned sites at Plattsburgh.<sup>46</sup> The first four crews dispatched to the 556th left Plattsburgh on 10 November with all crews returned by 18 November except the Vandenberg crew. The success of the operation could be traced at least in part to the existence of a contingency plan for this kind of situation. Further, it illustrated the type of emergency measures that are usually demanded under extraordinary circumstances.<sup>47</sup>

(S) u

The overall SAC missile performance was surprisingly good. Special problems that developed, e.g., LOX supply, acceptance of Minuteman ICBMs prior to contractor demonstrations, moving of crews to Plattsburgh, were worked out satisfactorily. The command learned that it could

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75

bring its missile force to alert in a very short time and with a minimum of difficulties. Cooperation from AFSC and the contractors was excellent. In general, implementation of the SAC/AFSC Agreement for ECC went very well. The role of SAC's missile alert force in the Cuban crisis was both significant and instructive. (S) (u)

Overall, missile acceptance programs fell behind schedule as a result of Cuba although installation and checkout tasks continued during the accelerated effort in bringing missiles to alert. At the end of 1962, it was difficult to determine whether final acceptance dates would be met as planned.<sup>48</sup> Since the major objective was readying ICBMs for alert, training which would have resulted in EWO degradation was cancelled. All Phase III or hardware training for Atlas F in the field and at Vandenberg stopped on 22 October. Academic training (Phase I) continued at Vandenberg on schedule. Phase II Atlas F ORT resumed at Vandenberg (576D) on 19 November and on site 576E at Vandenberg AFB on 26 November. Phase III unit ORT began again on 15 November for Atlas F and Titan I.<sup>49</sup> (S) (u)

Atlas D ORT, which stopped on 22 October, was scheduled to begin early in January 1963. Delay in training of replacement ORT personnel, especially in Atlas D RORT, was estimated at approximately two months. Although formal Phase III hardware training was suspended during [Defcon 2], units were instructed to accomplish and record all possible tasks while on alert or performing maintenance exercises. Crews performed

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77

simulated countdowns and positive control exercises [during Defcon 2.]<sup>50</sup>

With the exception of visits to Malmstrom and Plattsburgh AFBs, the Strategic Missile Evaluation Squadron cancelled its recurring visits to units.<sup>51</sup> In general then, the impact upon ICBM training was significant. (S) u

On the other hand, since the training program was based upon constant alert, Cuba lent credence to the basic rationale of the program. There were no major changes or adaptations, therefore, to be made in a crisis situation. At the end of 1962, there was little likelihood of major recommendations in missile training based upon the Cuban experience. Because crews were well adapted to alert, no degradation to crew proficiency occurred.<sup>52</sup> (S) u

Despite postponement in ORT and perhaps as much as a 30 day delay in Minuteman test launching at Vandenberg AFB, several major facets of the Cuban operation predominate. The primary goal of bringing ICBMs to alert status was eminently successful. It marked the first time on alert with a completely new generation of missiles -- the SM-80 Minuteman. Another highly important "first" was the excellent cooperation between SAC, AFSC and the contractors in bringing the ECC agreement to fruition. Difficulties were encountered -- for example, acceptance of SM-80 missiles at Malmstrom AFB prior to contractor checkout. Nevertheless, much was learned in the successful implementation of the agreement. (S) u

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78

While the overall missile alert record remained impressive, the performance of the Titan I was especially significant. On 29 October, of 56 Titan I missiles required on alert, 56 were in alert status. For several days, this weapon system achieved 100 per cent alert, a landmark in the SAC ICBM program.<sup>53</sup> The shakedown program, initiated early in 1962, proved valuable.<sup>54</sup> (TS) U

It should be remembered, of course, that Cuba posed a special situation. Because of the length of the crisis, a slow phasedown was possible [from Defcon 2 to a modified Defcon 2 and then to Defcon 3.] Also, strategic warning became available, resulting in a special situation that in some respects the command was not prepared for (for example, a lengthy period of dispersal). (TS) U

In retrospect, Cuba remained a successful, but special operation. It taught valuable lessons. The chances of an exact duplicate of Cuba in the future were exceedingly dim, but undoubtedly, SAC would be called upon to adjust to other perhaps radically different situations. It was hoped that new challenges would result, like Cuba, in successful conclusions. (U)

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Chapter IV  
COMMUNICATIONS

Several highly significant implications for communications resulted from SAC's actions in the Cuban crisis. In general, SAC communications performed well. But problems developed which clarified the need for different or more expanded measures in the future. (S) u

The earliest actions taken by communications were in support of CINCLANT Plan 312;\* calling up SAC allocated and emergency circuits as well as STN circuits; and measures designed to strengthen survivability. Between 10-20 October, with tensions over Cuba increasing, SAC communications supported the immediate buildup of forces in Florida at Homestead, McCoy and MacDill AFBs, since requirements exceeded base communications support ability. Among the circuits supplied by SAC were emergency voice and duplex, and full period duplex. Although command operations in support of the plan were completed by 20 October, difficulties encountered suggested that in the future a planning team should be established with representatives from SAC, the involved command and the Ground Engineering and Electronics Installations Agency (GEEIA). This team would be designed to establish direct access to equipment and personnel, and to prepare a plan of operation to support emergency actions in unforeseen contingencies.<sup>1</sup> (S) u

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\* Plan for use of SAC's Florida bases by tactical units in contingency operations against Cuba. (S) u

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Coincident with the declaration of Defcon 2, 24/1400Z October, all SAC allocated and emergency on-call circuits were called up. Also with implementation of Defcon 2, "Minimize" was instituted whereby teletype (message) and voice traffic was restricted to specified priorities. For voice traffic, priority 4 and higher was established, with "priority" and higher being the restriction for teletype.<sup>2</sup> Prior to Defcon 2, STN circuits were called up from the nearest STN grouping point. Direct distance dialing to dispersed bases had proved time-consuming and operationally unsatisfactory. The decision to provide STN circuits was made by Brigadier General Gordon Gould, SAC Director of Communications-Electronics, on 23 October. The first circuit was completed at 0030 hours, 24 October, with the last one installed at 1510 hours, the same day. Significant aid was given SAC by the Government Communications Management Group of AT&T.<sup>3</sup> ~~(S)~~ u

Difficulties encountered in determining installation locations lent credence to the suggestion that AT&T keep a permanent list of dispersal bases. Dispersal base surveys should also in the future include information on local AT&T facilities. Standby emergency circuits were another possibility to be weighed by communications planners.<sup>4</sup> ~~(C)~~ u

During the Cuban emergency, a total of 68 voice and 39 teletype circuits were established in support of all requirements, as follows:<sup>5</sup>

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81

Teletype

15 Coordination of Atomic Operations (CAO)  
Communications Network (COMNET) Engineered  
Military Circuits (EMC)  
23 SAC Teletype Net EMC  
1 SAF/McCoy AFB (New Circuit)  
—  
39 Total

Voice

24 SAC Telephone Net EMC  
32 Dispersed Bases (New Circuits)  
3 Special Purpose (M-154 New Circuits)  
6 Mobile Ground Station - Des Moines (New Circuits)  
3 New SAC Telephone Net Circuits  
—  
68 Total

Allocated and emergency on-call circuits were already wired and ready for activation. New circuits took from 6-20 hours to establish service. An average time of eight hours was required to complete a new circuit over an extended distance.<sup>6</sup> *(S) u*

With implementation of "Minimize," teletype traffic was handled without a backlog. Restricting message traffic to priority meant that administrative traffic could be greatly reduced. *Thus, with the onset of Defcon 2 on 24 October, teletype traffic throughout the Cuban period remained consistent.* The following provides an overall view of this traffic:<sup>7</sup> *(S) u*

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82

Originating

Average daily load prior to Defcon 2, all types	-	590
Average daily load after Defcon 2, all types	-	300

Terminating

Average daily load prior to Defcon 2 in Command Post	-	1200
Average daily load prior to Defcon 2 in SAC Hq	-	<u>1600</u>
	Total	2800
Average daily load subsequent to Defcon 2 in Command Post	-	2300
Average daily load subsequent to Defcon 2 in SAC Hq	-	<u>900</u>
	Total	3200
Average daily relay traffic prior to emergency	-	4253
Average daily relay traffic subsequent to Defcon 2	-	4301

Although teletype traffic remained constant in volume and flow, the number of addressees increased. In general, the SAC teletype system met the Cuban emergency well. It was shown that CPX experience rarely conforms to true crises. (S) u

It has been mentioned that among the early measures taken by communications-electronics were those immediately strengthening communications under attack conditions. Also, we have noted that SAC possessed no existing mobile communications facilities since the command was geared to fight a retaliatory war with little warning rather than anticipating a lengthy crisis allowing for dispersal with placement of mobile facilities. One of the essential elements the command moved to establish, therefore, was a mobile ground link with the airborne command post. Since no concrete plans existed, SAC acted to return two mobile multiplex communication vans from the Pacific as soon as possible. (S) u

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83

On 26 October, four days after President Kennedy's address to the nation, this command notified the Air Force Logistics Command (AFLC) that it had an urgent need for the vans to be redeployed in support of the air/ground segment of the SAC Post Attack Command Control System (PACCS). The original plan called for the vans to return to MacDill AFB after the Pacific tests for instrumentation removal.<sup>9</sup> AFLC responded immediately and directed the vans -- one each from Johnston Island and Hickam AFB -- be delivered as soon as possible to Offutt AFB.\*<sup>10</sup> On 28 October, one van arrived at Des Moines with the other deployed at Offutt AFB. Although both vans were specifically built for the Project Dominic test series, they were deployed without modifications because of the urgency of the Cuban situation.<sup>11</sup> ~~(S)~~ u

Prior to the Cuban emergency, SAC communications planners had weighed the possibility of using the Collins Radio Company Cedar Rapids station as a backup in an emergency. Planning had not been completed at the time the crisis erupted. This radio facility could be used to augment the SAC Short Order or Fast Talk systems\*\* in the event of loss

\* Vans were semi-trailer type, over 26 feet long, eight feet wide, with a height of 8-1/2 feet. Each weighed 22,000 pounds. ~~(S)~~ u

\*\* The so-called Short Order system is a SAC tactical high frequency air/ground single sideband (SSB) system which provides positive control of the SAC force. It is a high power tactical voice system. In general the Fast Talk system is a SAC high frequency SSB radio system providing an alternate means of command and control in the event landline communications fail. It is, in short, a voice backup to the SAC Primary Alerting System. The Fast Talk system gives the SAC Command Post and the airborne command post another means of transmitting launch and execution orders in case all or any part of the landline system is lost. (SAC Manual 100-24, Annexes II, IV) ~~(S)~~ u

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84

of primary command facilities. It could also be utilized in case of an inability to make contact because of jamming or atmospherics.<sup>12</sup> (S) u

The Collins station possessed the ability to operate on all SAC frequencies through high power single sideband (SSB) transmission. On 24 October, numbered air force Short Order stations were notified of the plan and coordination was carried out with Cedar Rapids. Approximately 48 hours were needed for complete integration of the Collins station with 20 hours required for the establishment of procedures after the initial decision. Based upon this experience, it was recommended that, in order to prevent delays in any future emergency, a standard procedure be adopted with an execution code word assigned for complete integration of the Collins station.<sup>13</sup> (S) u

Similarly, SAC provided a military backup to Bell Telephone operators at AT&T air/ground sites at Red Oak, Iowa, and North Bend, Nebraska. Command personnel were in place at Red Oak and North Bend on 23 October.\*<sup>14</sup> Thus, military liaison with the Telephone Company was provided to insure that someone would be available to operate the ground/air terminal in the event hostilities started. (S) u

A requirement for survivable communications with dispersed forces existed during the Cuban crisis. Upon notification of launch of SAC forces and/or apparent loss of commercial and STN facilities at dispersal bases, the following procedures would be applicable:<sup>15</sup> (1) Continuously monitor UHF and HF single sideband (SSB), using communications

\* 0620Z at Red Oak, 1430Z at North Bend

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85

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equipment aboard dispersed aircraft; (2) UHF frequency would be the lower SAC Command Post frequency; and (3) HF frequency would be determined by each aircraft selecting the most readable Short Order frequency. ~~(S)~~ u

It will be recalled that a survey was conducted of all dispersed base communication support facilities designed to establish backup communications through locally available MARS facilities. Although the Air Force Communications Service (AFCS) and ADC provided support, a lack of uniform facilities along with distances from SAC command posts dictated discarding the MARS plan. A proposal to dispatch SAC-owned MARS equipment to dispersed bases was also vetoed.<sup>16</sup> ~~(S)~~ u

On 25 October, 25 KWM-2 high frequency transceivers were located at Rome Air Materiel Area (ROAMA) and were airlifted between 26-28 October to all dispersed bases except Dobbins, Tinker, Logan, Burlington, Andrews, Hancock, McClellan and Spokane.<sup>17</sup> Dobbins used base equipment receiver with phone patch capability to transmitter; Tinker began with inadequate MARS equipment until SAC supplied KWM-2 apparatus; Logan and Burlington used MARS facilities; Andrews utilized the AFCS air/ground station with remote keying into the SAC Command Post; Hancock later received the KWM-2 originally scheduled for Palm Beach; and McLellan and Spokane used SAC KWM-2 equipment received on 29 October.<sup>18</sup> ~~(S)~~ u

Procedures called for each station to check into the system as soon as a transmit ability had been established. High frequency SSB at dispersal sites monitored broadcasts from the Offutt AFB Short Order station.

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86

Beginning 28 October, broadcasts originated from the airborne command post, thus exercising high frequency control of dispersed aircraft. Numbered air forces polled dispersed locations in order to determine whether messages were received and to establish quality of reception and frequency. Results were reported to the augmented battle staff (DOCEOR) at SAC Headquarters. Effective 29 October, polls were taken during each 24 hour period within one hour after a "Noah's Ark" message had been broadcast from the airborne command post over Short Order frequencies.<sup>19</sup> This procedure, originally designed as a "one time" effort, continued until dispersal was ended on 24 November (1800Z) since unsatisfactory results were achieved on 29 October. Acceptable results were reported on 30 October and continued improvement developed through termination on 24 November.<sup>20</sup> ~~(S)~~ *u*

As far as execution messages were concerned, dispersed crews would follow the same procedures prescribed for a unit command post. A "Looking Glass" message would be challenged by monitors as if received by telephone. Following reception of an execution message, should contact be lost with the agency initiating the message, the crew would communicate with the next higher headquarters up to and including SAC Headquarters. Should no ground contact be available, the airborne command post and/or any PACCS aircraft would be contacted. Should all efforts to confirm the message prove abortive, crews were directed not to launch.<sup>21</sup> ~~(S)~~ *u*

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87

It can readily be seen that lack of a deployment plan hindered rapidly establishing an SSB ability at dispersal locations. Maintenance spares and difficulties with radio equipment also plagued the operation.

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] An adequate

deployment plan covering all aspects of high frequency operations at dispersed locations was recommended. Despite problems, however, the operation proved successful, especially considering the time in which it was accomplished and the adverse conditions encountered.<sup>22</sup> ~~(b) u~~

In general, no operations orders existed for dispersal of communications. Crews followed instructions from the communications annex of the dispersal plan. This procedure, however, was not adequate for positive control of dispersed units. Thus, it was recommended that an operations plan with a current communications annex be published and kept current.<sup>23</sup> ~~(b) u~~

The communications annex would cover the following procedures:<sup>24</sup>

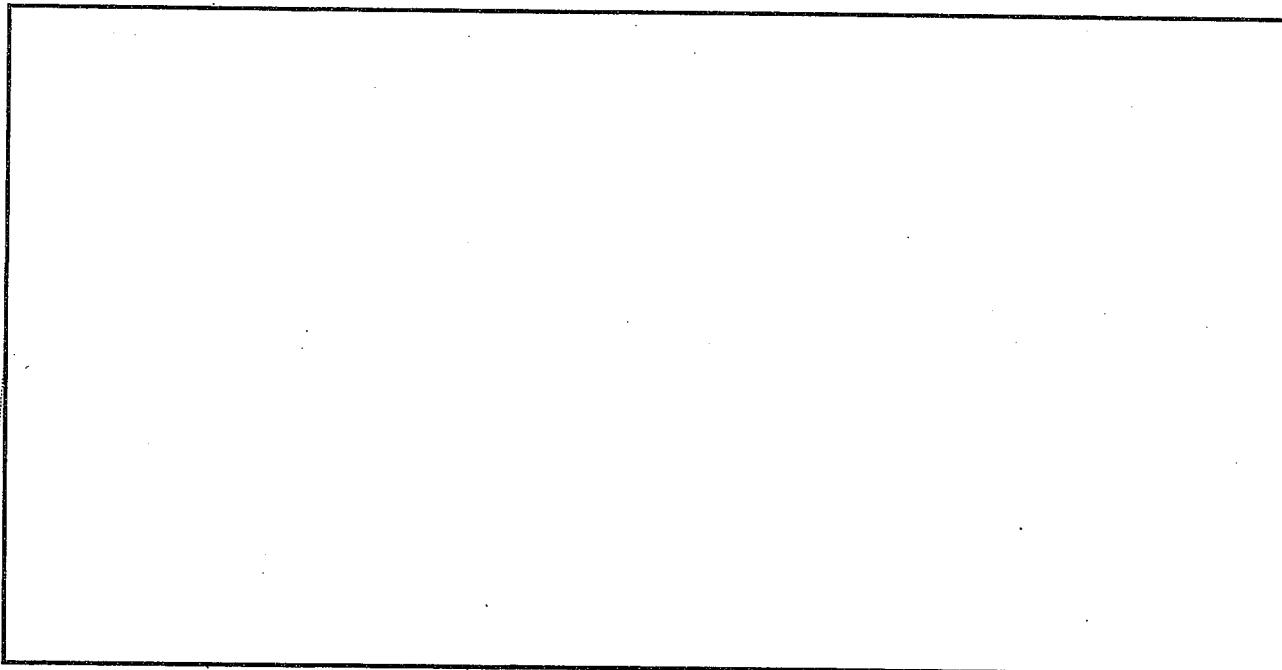
- (1) A monitor-receive ability for backup radio use including reporting procedures, transmission requirements, maintenance steps, and spare parts availability; (2) Use of Collins Cedar Rapids radio station including procedures for assigning priority of use; (3) Use of mobile multiplex vans; (4) Cryptographic facility availability including requirement for procurement and distribution of crypto pads; (5) Location of STN "drops" at dispersed locations; and (6) Procedures for publishing a telephone directory of dispersed bases for SAC Battle Staff use.

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During the Cuban crisis, the key element which would dictate the relative success of the SAC mission remained warning. Since in the case of Cuba a southern warning system was necessary, DOD directed the Air Defense Command (ADC) to establish what amounted to a Southern Missile Warning System.\* Existing U.S. radars would be employed to detect missile launches from Cuba. On 25 October, ADC informed SAC that a plan had been prepared, using a radar test facility at Moorestown, New Jersey. The plan was expanded on 27 October to include long range radars at Thomasville, Alabama, and Laredo, Texas. The code name, Falling Leaf, designated the entire system.<sup>27</sup> (S)

\* Although this system was being organized by ADC, SAC defined the character of warning and evaluated the credibility of the system. In general, this command was not satisfied with the actions NORAD took in support of the Southern Missile Warning System. (Interview, H. S. Wolk, Historian, with Brig Gen Gordon Gould, Jr., Dir C-E, Hq SAC, 26 Nov 62.) (S)

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89

Available information indicated that the Moorestown radar could detect with a high degree of reliability all missiles launched from the eastern half of Cuba against all ZI targets except those in Florida and the southwestern U.S. Detected missiles would be tracked with launch and impact locations along with predicted time of impact automatically computed and relayed by voice circuits to ADC, SAC and USAF. Approximately eight minutes warning would be available in the event missiles were launched against SAC Headquarters. However, the Thomasville and Laredo radars possessed no computer ability and had little value in detecting launches except to confirm detection by Moorestown and to provide an approximation of the number of missiles fired.<sup>28</sup> *(S) u*

On 27 October, a "hot line" voice circuit from Moorestown was installed in the SAC Headquarters command post. Voice circuits were also established between Moorestown and Thomasville, Laredo, NORAD and Headquarters USAF. This command requested that NORAD immediately inform SAC should the Moorestown tracker and/or reporting facilities become inoperable.<sup>29</sup> *(TS) u u*

Despite improvisation of a Southern Missile Warning System, it became apparent that a serious gap existed in missile detection and warning from the South. The Moorestown-Thomasville-Laredo complex was an interim system. It did not provide adequate performance, coverage or reliability. Thus, one of the paramount requirements, in the aftermath of Cuba, was that of a complete radar system providing omni-directional warning against missiles. *(S) u u*

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90

One of the major concerns of SAC communications-electronics during the Cuban situation was the persistent number of reports from Chrome Dome aircraft identifying electronic interference, spoofing or jamming. Electronic interference to bombing-navigation radar systems on Chrome Dome sorties particularly plagued the "Black Goat" refueling area in the northeast. The increase in interference reports coincident with the Cuban crisis pointed directly to Communist Bloc activity. A strong possibility existed that jamming emanated from Communist bloc shipping in the New Brunswick-Newfoundland area.<sup>30</sup> (S) 4

Several incidents were reported during 27-29 October in the Goose (AFB) Air Defense Sector (GADS) in which a radio station identifying itself as "Ocean Station Bravo" contacted Chrome Dome aircraft requesting flight information, home station, and destination. Ocean Station Bravo itself denied contact with these aircraft. Chrome Dome sorties challenged the transmission and the station was unable to reply. The information requested was not given. It seemed that overt attempts were being made to collect intelligence and test communications security. In the wake of these incidents, all Chrome Dome crews were briefed on necessary security requirements and the need for reporting violations. Crews were warned not to initiate unscheduled transmission to airborne or ground stations unless required for air traffic control or flight safety. Further, unidentified or unauthenticated contacts would be

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91

terminated while titles of authentication systems would not be discussed over radio or other insecure media.<sup>31</sup> (S) (U)

It had previously been known, throughout 1962, that Soviet bloc intercept activities had been operative in Cuba. A Soviet-Cuban intercept unit in Havana was reportedly attempting to intercept all radio communications of American forces in the Caribbean, Mid-Atlantic, and Gulf coasts. In general then, SAC took measures to reduce the volume of electrically-transmitted "plain language" messages and conversations. These actions included:<sup>32</sup> (1) Encryption of both classified and unclassified communications in the affected area; (2) Maximum use of mail and courier facilities; (3) Making certain classified information was not transmitted in the clear over voice circuits; and (4) The use of all available means, including codes and secure operation procedures, to protect tactical radio telephone communications. (S) (U)

The large number of "Hot News" reports concerning interference, jamming and spoofing inundated the SAC Warning Center, requiring a special communications analysis team within the DOCE emergency staff. If necessary, data was forwarded to the SAC Battle Staff and flying crews. Thus, this experience indicated the need for special ability in electronic phenomena analysis that could be used in an emergency situation.<sup>33</sup> (S) (U)

#### Summary

It could be said then, with validity, that "communications, by and large, were not a limiting factor at all during this crisis."<sup>34</sup>

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92

Communications acted immediately to activate and improve survivability, dispersal and security under attack conditions. A great deal of effort was devoted to improving communications for dispersal locations. The Cuban crisis taught that dispersal demands solid, reliable communications. Adequate circuits and cryptographic systems are required. Radio transmission to dispersed sites is also mandatory in order to provide "go" notification should land lines be interdicted. Further, radio provides a more rapid means of communication than individual calls to each dispersed base. (S) u u

Warning and mobility were additional necessities under crisis situations. The Southern Missile Warning System devised during the crisis was inadequate. A stringent requirement existed for a complete, reliable radar system for omni-directional warning against missiles. In retrospect, a mobile communications plan became a necessity. The Cuban experience showed that predictions of the exact nature of war and crisis are more often than not proved wrong. Therefore, mobile communications supporting any kind of SAC deployment would remain an important link in command control. (S) u

There were other evolving needs. In-being communications security -- and an intelligence ability to analyze jamming, spoofing and interference reports -- were pointed up by Cuba. (S) u

This command learned that it could not depend upon crises to necessarily follow established patterns flowing from exercises or CPXs.

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93

Neither could it rely upon stop-gap communications, e.g., MARS, amateur or reserve transmission capabilities. There was no question that SAC communications-electronics performed remarkably well in the Cuban crisis. Communications training geared to sudden alerts paid dividends. The Cuban experience presented invaluable lessons. It showed what could be depended upon in an emergency; what might be discarded; and what must be added in order to shape an ability to meet any contingency.

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94

Chapter V

INFORMATION POLICIES

During the Cuban crisis the Assistant Secretary of Defense for Public Affairs, Mr. Arthur Sylvester, controlled the release of information to the public concerning participation of the military services. He directed that no information, including pictures and films, would be released without his approval.<sup>1</sup> Accordingly, SAC notified all its field units to comply with the following DOD guidance in dealing with the public news media.<sup>2</sup> (U)

All press inquiries related to specific Cuban operations will be referred to Washington. Transportation of media representatives in ships or aircraft not authorized. Access to bases authorized on a normal basis, but access to operations areas may be restricted in order to safeguard operational information. Identification of individual units in staging areas or in transit not authorized. There will be no identification of type of aircraft used for aerial reconnaissance. (U)

Until further notice newsmen will not be permitted to participate in flights aboard SAC tactical aircraft. This restriction applies to any requests for flights previously approved by this headquarters [DOD] but not yet completed. In addition, media visits and normal community relations tours to alert facilities and missile sites will not be allowed until further notice. (U)

This strict policy remained in effect during the crisis. However, General Power sought to have the DOD's position modified in order to strengthen the nation's current and future security in dealing with incidents of a similar nature. With this objective in mind, he proposed

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on 2 November that four major SAC activities in support of the Cuban quarantine be publicly released:<sup>3</sup> Airborne Alert, B-47 Dispersal, Cuban Reconnaissance Flights, and Atlantic Surveillance Operations.

(U)

Advised of DOD's disapproval,<sup>4</sup> on 7 November General Power requested the Secretary of Defense to release the information on the basis of three main considerations.<sup>5</sup> It would lessen partisan attacks on Presidential policies, increase morale of military service personnel, and apprise the enemy of the nation's strength. As General Power stated: "Therefore, from a deterrent point of view, I believe it to the national advantage that the high degree of readiness of this command be made known, within the bounds of security, to all members of the Communist Bloc, and particularly, the Soviet Union."<sup>6</sup> In spite of the CINCSAC's strong appeal, the Secretary of Defense never replied to his letter. However, portions of the CINCSAC's proposals outlining the command's significant contributions to national defense were included in a November DOD news release after the Cuban crisis ended.<sup>7</sup>

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## Chapter VI

SUMMARY<sup>1</sup>

During the Cuban crisis SAC prepared and retained on alert a force that unquestionably represented the most powerful instrument for destruction ever assembled. Yet its primary mission during the crisis, as in the past, was to prevent war by convincing the potential aggressor that nothing would be gained, indeed all might be lost, by expanding a limited conflict into a nuclear war. General C. E. LeMay, reflecting on the military lessons of the Cuban confrontation, saw it as deterrence in action, an excellent example of the credibility of our nuclear delivery capability. Only under the protection of the strategic nuclear force could the forces policing the quarantine operate with confidence.<sup>2</sup> President Kennedy has spoken of SAC's contribution as "unparalleled by any country in the history of air power."<sup>3</sup>

(U)

The nature of the crisis afforded SAC an opportunity to take advantage of warning time and thus to bring its forces up to an unprecedented state of readiness. Twenty-four hours after [declaration of A-hour] SAC had 1436 bombers and 145 missiles generated. Peak strength was reached on 4 November when the command had ready 1479 strike aircraft, 182 missiles, and 2962 weapons. During the time it was [in Defense] command, according to its Director of Operations, could have

[launched 92.5 percent of its weapon systems within an hour] Not enough tankers were available to support the rest. (TS)

In addition to the high state of readiness maintained over about a month period, several other "firsts" were recorded. It was the first time SAC had flown a 1/8 airborne alert: it launched 2,088 B-52s during the crisis and at any given time an average of 65 B-52s were in a position to proceed to their targets if directed. Also, the command dispersed 183 of its second cycle B-47s to 32 alternate military and civilian airfields. Although plans had been prepared and periodic tests conducted, it was the first deployment on such a large scale and for such a long duration (22 October-24 November). In the relatively short operational life of the SAC missile force there was no precedent for the alert generation during the October and November 1962 period. [With a substantial assist from Air Force Systems Command and Air Force Logistics Command, SAC was able to increase its alert missile status by over one-half -- from 112 on 19 October to a peak of 186 on 3 November.] Also for the first time, new Minuteman solid fuel missiles, of which there were none ready at the beginning of the crisis, went on alert at Malmstrom AFB, Montana, 27 October. (S)

*Alert missile status*  
TSCC

Certainly the salient feature of SAC's role in the crisis was its accelerated generation of strategic nuclear power, but reconnaissance also paid an important role in determining Soviet intentions during the suspense-ridden days of early autumn. High altitude photography, electronic ferret flights, and sea search operations were carried out with

UNCLASSIFIED

93

a high degree of skill and a low incidence of materiel failure. The importance of the information obtained has been discussed previously in this history and need not be repeated here; suffice to say that the U.S. intelligence appraisal of developments during the crisis was based to a great degree on the data brought back by reconnaissance aircraft. (S)u

No commitment of men and materiel of the magnitude of SAC's participation in the Cuban crisis could be effected without problems. A discussion of the more significant and general problem areas must be based upon an understanding of the philosophy which pervaded the command's emergency plans. Since it must be prepared for retaliating under the worst possible condition and with little or no warning, plans primarily emphasized reaction under tactical warning conditions. It was natural, therefore, that over the long period during which SAC remained at a high state of alert some weaknesses in plans and procedures would emerge. This was particularly true in dispersal and command and control. Still, Cuba was a unique situation and the conditions under which SAC generated its forces were unique. Consequently, there was no reason to change basic command philosophy. Plans were basically sound, requiring only slight modification and added detail. They would remain based on a situation of minimum warning. If strategic warning was received, the command would have time to again adapt to the particular situation. (S)u

The major and almost unanimous problem encountered by B-52 organizations concerned weapons availability. Basically, the problem was

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99

caused by insufficient weapons of the proper type for both 1/8 airborne alert and full ground alert, and was compounded by the need to rotate aircraft from ground alert to airborne alert and back again. This temporarily degraded the EWO posture, caused many extra manhours for munitions specialists who had to continually load and unload weapons, and increased the possibility of a nuclear incident. The weapons modification program, scheduled for completion in time for SIOP-64, would alleviate the problem. However, for the future, if programmed weapons did not become available from the Atomic Energy Commission because of production slippages, substitution was the only recourse. (S) (U)

For dispersal of the medium force, plans were adequate for the initial dispersal, but they would require modification for sustained operations. There was a need for improved coordination with agencies at dispersal locations, better understanding of support requirements, and more specific operational and maintenance procedures. (S) (U)

Manpower resources were generally adequate. A major problem did involve the combat defense forces, however, because they were inadequately manned to provide security during the increased alert posture and dispersion of forces. Despite augmentation by non-security personnel, air police were generally overworked for extended periods. Some relief for this situation was anticipated early in 1963 when plans called for the air police field to be manned above 90 per cent. (U)

(U) The above problems and others of less significance were very real to units which encountered them during the crisis. They caused temporary

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100

confusion and inconvenience, many headaches, and extra work. Yet SAC plans consigned to the hot crucible of experience proved of good temper. Commanders believed them adequate in general, although they had to make spot decisions on situations not specifically covered. Some problems required immediate attention and some were temporarily accepted and attacked after the command returned to normal operations. None, however, was serious enough to disrupt SAC operations during the crisis. (U)

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ADDENDUM

AIRBORNE ALERT STATUS

21 October-22 November 1962

<u>Date</u>	<u>Sorties</u> <u>Required/Actual</u>	<u>7</u>	<u>GAM-77s</u>	<u>GAM-72s</u>
21 Oct	12/11		0	0
22 Oct	38/21		6	12
23 Oct	66/63		20	44
24 Oct	66/63		20	36
25 Oct	66/65		20	44
26 Oct	67/66		22	44
27 Oct	67/65		22	48
28 Oct	69/63		24	48
29 Oct	69/68		24	52
30 Oct	71/70		24	44
31 Oct	71/71		26	52
1 Nov	72/72		26	48
2 Nov	73/73		28	52
3 Nov	73/72		28	52
4 Nov	73/71		26	50
5 Nov	75/73		26	48
6 Nov	75/75		28	48
7 Nov	75/74		26	48
8 Nov	75/75		28	48
9 Nov	75/75		28	48
10 Nov	75/71		26	48
11 Nov	75/73		28	52
12 Nov	75/73		28	52
13 Nov	75/74		28	48
14 Nov	75/75		28	52
15 Nov	75/72		26	48
16 Nov	75/74		28	52
17 Nov	75/75		28	52
18 Nov	75/73		24	48
19 Nov	75/75		26	52
20 Nov	75/72		26	52
21 Nov	22/26		26	52
22 Nov	12/12		8	16
			0	0

NOTE: No GAM-77s were carried by units participating in the indoctrination program on 21 Oct 62. Of the 66 B-52 sorties initially committed to the 1/8 airborne alert on 22 Oct, 10 were required to carry two GAM-77s each (one sortie of the 97, 72, 4038, 4039, 4135, 4137, 4241, and 379 wings; two sorties of the 42BW). The 4136SW added one GAM-77 carrying sortie on 26 Oct, the 4239SW added one on 28 Oct, the 4042SW added one on 30 Oct, and the 19BW added one on 2 Nov. Thus, the number of GAM-77s required on airborne alert increased from 20 to 28 by 2 Nov, and remained at that level until 21 Nov.

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SOURCE: 1-SAC-V1 reports as of 0001Z on date subsequent to date cited. (U)

UNCLASSIFIED

Chapter I  
FOOTNOTES

overall footnotes  
101  
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to Dexcon, spoofing  
ECM counter-  
measures  
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1. Briefing, "Cuban Threat Developments," presented to SAC Historical Staff by Capt R. C. Hicks, DIET, 22 Jan 63. This briefing, with its accompanying photographs, is included in the photo volume of this history and constitutes the pictorial record of Soviet military accomplishments in Cuba. The best unclassified summary of the introduction of Soviet arms into Cuba that has appeared to date was made to the House Armed Services Committee by SecDef McNamara on 30 Jan 63.
2. 1st Ind (Lt Col H. F. Laughlin, DOCOR, to DOCOC) to IOM, DOCOC to DOCOR, "Chronological Listing of Major Actions," 31 Oct 62; Msg, SSO/TAC 10-10-27, AFSSO TAC to AFSSO USAF, 10/1750 Oct 62; See photos of plotted recon missions beginning 14 October for flight pattern of Quick Fox in the photo volume. Due to the sensitive nature of this Security Service mission, the historian has been able to include only a bare outline of this mission.
3. Msg, Zippo 11-197, SAC to TAC, 05/0054Z Nov 62.
4. Msg, DOCORM B-84763, SAC to 2AF et al., 12/2040Z Sep 62, Ex 1; Msg, JCS 2324-62, JCS to SAC, 12/2300Z Sep 62.
5. Hist of 2AF, Jan-Jun 61, p 209.
6. Msg, DOCORM B-84763, SAC to 2AF et al., 12/2040Z Sep 62, Ex 1.
7. Ibid.; Msg, COOP-PTS 1016, CINCONAD to CINCSAC, 14/0010Z Sep 62, B-84789.
8. Msg, Zippo 09-137, 55SRW to SAC, 14/2330Z Sep 62; Msg, Zippo 09-196, 544RTG to SAC (by messenger), 15/1610Z Sep 62; Msg, DODTR 2AF-62-1360, 2AF to 21AD, 15/1520Z Sep 62, B-84809, Ex 2.
9. IOM, Lt Col R. J. Swofford, Ex, DI, to DXIH, "Chronology of SAC Participation in Cuban Crisis," 16 Nov 62.
10. See Ex 3 for mission recaps.
11. Msg, TS B-85132, SAC to 2AF, 13/0508Z Oct 62; Msg, Zippo 10-220, 2AF to 55SRW, 14/0216Z Oct 62.
12. See Ex 3 for mission recaps.
13. Hist of 55SRW Dep Comdr for Ops, Oct 62, p 8, B-89856; Msg, DI-DO B-89946, SAC to JCS, 21/2103Z Nov 62; Msg, JCS 3531-62, JCS to SAC AFSSO, 22/0035Z Nov 62; See also Ex 3 for mission recaps.

14. See Ex 3 for mission recaps.
15. Interview, Robert Kipp, Historian, with Lt Col J. M. Jackson, Ch, Surveillance Br, DOCOR, 28 Nov 62.
16. 1st Ind (Lt Col A. F. Laughlin, DOCOR, to DOCOC), to IOM, DOCOC to DOCOR, "Chronological Listing of Major Actions," 31 Oct 62; Msg, TS B-85131, SAC to 2AF, 13/0508Z Oct 62; Msg, DOCORM B-85143, SAC to 2AF, 13/2314Z Oct 62, Ex 4; Operations Order 2-62, "Blue Ink," 19 Oct 62.
17. See Ex 3 for mission recaps.
18. Msg, Zippo 10-698, SAC to 2AF, 28/0322Z Oct 62; See Ex 3 for mission recaps.
19. See Ex 3 for mission recaps.
20. Ibid.
21. Msg, SAFE 00705, 306BW to CSAF et al., 12/0310Z Nov 62, Ex 5, Hist of 55SRW, Nov 62.
22. Msg, 55DCOP 62-385, 21AD to 2AF, 27/1119Z Oct 62; Msg, Zippo 10-438, 55SRW to 2AF, 29/0617Z Oct 62; Msg, DO B-89686, SAC to CINCLANT, CINCONAD, TAC, 06/0525Z Nov 62.
23. Msg, DO B-89686, SAC to CINCLANT, CONAD, TAC, 06/0525Z Nov 62.
24. Msg, DOCOR 1-11-7, AFSSO SAC to COMKEYWESTFOR, et al., 01/0556Z Nov 62.
25. Msg, CINCLANT to CINCSAC, 04/1342Z Nov 62.
26. Msg, DOCOR B-89674, SAC to 2AF et al., 5 Nov 62. The CIN  
explained that use of IFF

but SAC said in the interests of safety the IFF had to be used during the entire mission. (Msg, Zippo 11-263, 55SRW to SAC, 10/1932Z Nov 62; Msg, Zippo 11-371, SAC to 2AF, 10/2153Z Nov 62.) (S)

27. Msg, CINCLANT to CINCAFLANT, 6/2138Z Nov 62; Msg, NCRC-C 7155, CINCONAD to 32nd NORAD Region, 7 Nov 62.
28. Msg, Zippo 10-804, SAC to AFSC, ref AFXDC 93651, 30 Oct 62, Ex 5; Msg, Zippo 11-155, 544RTG to SAC, "Final ELINT/Quick Check B-58 . . .," 3/2216Z Nov 62.

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(b) (3)-50 USC 403  
(b) (3)-18 USC 798  
(b) (3)-P.L. 86-36

UNCLASSIFIED

SECRET

103

29. Briefing, "Cuban Threat Developments," presented to SAC Historical staff by Capt R. C. Hicks, DIET, 22 Jan 63. Photos and text of briefing included in photo volume. See also SecDef McNamara's statement before House Armed Services Committee, 30 Jan 63.

30. Interview, Robert Kipp, Historian, with Col E. A. Powell, Ch, Recon Br, DO, 20 Nov 62.

31.  Ibid. The historian in this early period has been forced to rely on the interview in lieu of documentation. The basic Operations Order stating Brass Knob requirements and some 20 other documents known to exist and to bear on early operations were at the time of their preparation placed in a special sensitive category and have not been downgraded. ~~(S)~~ W

32. Hist of 4080SW, Special Operations 10-31 Oct 62, p 1, B-90438.

33. Interview, Robert Kipp, Historian, with Maj Richard S. Heyser, 27 Nov 62; Hist of 4080SW, Special Operations 10-31 Oct 62, p 5, B-90438.

34. Report, "Operating Location X Flying Time for the Month of October," Ex 6, Hist of 4080SW, Special Operations 10-31 Oct 62, B-90438.

35. Interview, John Bohn, Ch, DXIH, with General Thomas S. Power, CINCSAC, 15 Nov 62.

36. Msg, AFCVVC 1210-233, USAF to SAC, 12/1910Z Oct 62, Ex 6.

37. Hist of 4080SW, Special Operations 10-31 Oct 62, pp 1-3.

38. Interview, Robert Kipp, Historian, with Maj Richard S. Heyser, 27 Nov 62; Map plot of mission, 14 Oct, in photo volume.

39. Interview, Robert Kipp, Historian, with Brig Gen Robert N. Smith, 22 Jan 63.

40. Hist of 4080SW, Special Operations 10-31 Oct 62, pp 2, 3, B-90438.

41. Hist of 4080SW, Special Operations 10-31 Oct 62, pp 4-5; Msg, Zippo 10-149, SAC to 93BW, 14/2121Z Oct 62; Interview, Robert Kipp, Historian, with Col E. A. Powell, CH, DOCOR, 16 Apr 63.

42. Hist of 4080SW, Special Operations 10-31 Oct 62, p 6; Interview, Robert Kipp, Historian, with Maj Richard S. Heyser, 27 Nov 62.

43. Interview, Robert Kipp, Historian, with Maj Richard S. Heyser, 27 Nov 62. On 29 Oct Maj Heyser with several other reconnaissance specialists and General LeMay were called to meet with President Kennedy. The President wanted to thank the reconnaissance units

UNCLASSIFIED

SECRET

UNCLASSIFIED

104

through one of their members for their skilled performance. He said that evidence gathered on 14 and 15 October gave him the concrete evidence upon which to act. This information has since appeared in many unclassified sources. The citation accompanying the awarding of the Air Force Outstanding Unit Award (First Oak Leaf Cluster) to the 408CSW also stated: "On 14 October 1962, aircraft of this organization flying at extreme altitudes over Cuba made photographs that provided the United States government with the first conclusive evidence of the suspected introduction of Soviet long range offensive missiles into the Island of Cuba." (Complete citation quoted in NOTAM, newspaper published by Laughlin AFB, 30 Nov 62.) (U)

44. See briefing and photos, "Cuban Threat Development," in photo volume.
45. Msg, BCO 1425, AFSSO SAC to AFSSO McCoy, 17/0904Z Oct 62; Hist of 408CSW, Special Operations 10-31 Oct 62, pp 6-7.
46. See map with plotted mission route, 17 Oct 62, in photo volume.
47. Hist of 4080SW, Special Operations 10-31 Oct 62, p 7.
48. Msg, AFSSO McCoy to AFSSO SAC, 17/1730Z Oct 62, B-14161; Msg, AFSSO McCoy to AFSSO SAC, 17/1845Z Oct 62, B-14164; Msg, 4080SW, Laughlin to AFSSO SAC, 17/1953Z Oct 62, B-14166.
49. See briefing and photos, "Cuban Threat Development," in photo volume.
50. Msg, BCO 62D 1444, AFSSO SAC to AFSSO McCoy, 18/1015Z Oct 62 (execution); Msg, AFSSO McCoy to AFSSO SAC, 17/2015Z Oct 62; Msg, SSOM-19-10-01, AFSSO McCoy to AFSSO SAC, 19/0015Z Oct 62; See also mission on map in photo volume.
51. Msg, BCO 62D 1471, AFSSO SAC to AFSSO Laughlin, 19/0447Z Oct 62 (execution); Msg, SSOM 19-10-04, AFSSO McCoy to AFSSO SAC, 19/2010Z Oct 62; Report, "Operating Location X Flying Time for October," Ex 6, Hist of 4080SW Special Operations 10-31 Oct 62, B-90438.
52. See briefing and photos, "Cuban Threat Developments," in photo volume.
53. N. Y. Times, 23 Oct 62.
54. Hist of 4080SW, Special Operations 10-31 Oct 62, p 9, B-90438.
55. Interview, Robert Kipp, Historian, with Maj Richard S. Heyser, 27 Nov 62; Ex 6, Hist of 4080SW, Special Operations 1 Nov-31 Dec 62, B-90726.

UNCLASSIFIED

UNCLASSIFIED

105

56. Msg, SSOM 22-10-01, AFSSO McCoy to AFSSO SAC, 22/1618Z Oct 62. This was the only time this camera was used in October. See also mission plotted on map in photo volume.
57. Msg, SSOM 20-10-01, AFSSO McCoy to AFSSO SAC, 20/1705Z Oct 62; Msg, SSOM 22-10-01, AFSSO McCoy to AFSSO SAC, 22/1618Z Oct 62; Msg, SSOM 23-10-02, 23/1855Z Oct 62.
58. Msg, BCO 62D 1586, AFSSO SAC to AFSSO McCoy, 24/1235Z Oct 62.
59. Msg, SSOM 25-10-03, AFSSO McCoy to AFSSO SAC, 25/1730Z Oct 62.
60. Msg, BCO 62D 1623, AFSSO SAC to AFSSO McCoy, 26/0944Z Oct 62; Msg, Zippo 10-710, SAC to CONAD, et al., 28/0555Z Oct 62.
61. Msg, DP 5337, 4080SW to CSAF, "Casualty Message (Initial) Missing Report," 28/1130Z Oct 62, Ex 5, 4080SW, Special Operations 10-31 Oct 62, B-90438.
62. Interview, Robert Kipp, Historian, with Maj Richard S. Heyser, 27 Nov 62.
63. Msg, Zippo 11-103, SAC to Armed Forces Institute of Pathology, 2/1938Z Nov 62, Ex 8; Ltr, Col Frank M. Townsend, Dir, Armed Forces Institute of Pathology, to CINCSAC, "Autopsy on Major Rudolf Anderson, Jr., USAF," 28 Dec 62, Ex 9; Msg, JOPREP 1066, CINCLANT DISUM No 7, as of 28/2400Z Oct, from CINCLANT to AIG 930, "Operations Scabbards," 29/0012Z Oct 62. See also photo alleged by Cubans to be of crash scene, in photo volume.
64. Los Angeles Times, 5 Nov 62.
65. Ibid., 7 Nov 62.
66. DAF SO G-120, 20 Nov 62, par 1.
67. Msg, JCS 3066-62, JCS to SAC, 28/1607Z Oct 62. The order had no doubt been received by telecon earlier because SAC sent a Zippo message to the 4080th Wing cancelling flights (10-721) on 28/1556Z Oct 62.
68. Atch, Memo to CSAF from Lt Gen W. H. Blanchard, IG, 29 Oct 62, to Ltr, Col D. M. Dessert, Asst Exec Off, ACS/I, to AFSSO SAC, Attn Maj Gen K. K. Compton, "Letter of Transmittal," 15 Nov 62 (AFCIG-TS 256-62).
69. CINCLANTFLT Operations Order 29-62.
70. Memo for the Record, Maj Orville W. Clancy, DOCORM, n.d., circa 28 Oct 62.

UNCLASSIFIED

UNCLASSIFIED

106

71. Msg, DOCOR B-89365, CINCSAC to COMKEYWESTFOR, 24/1300Z Oct 62, Ex 10.
72. Msg, VC 28-10-125, AFSSO SAC to AFSSO USAF, personal for Broadhurst from Harris, 28/1727Z Oct 62, Ex 7; Memo for the Record, Maj Orville W. Clancy, DOCORM, n.d., circa 28 Oct 62.
73. Msg, JCS 3144-62, JCS to AFSSO SAC, et al., 31/2345Z Oct 62, Ex 11.
74. Msg, CINCLANT to CINCLANTFLT, et al., 02/0046Z Nov 62.
75. Msg, JCS 3108-62, JCS to SAC, 30/2135Z Oct 62; Msg, JCS 3134-62, JCS to SAC, 31/2200Z Oct 62.
76. Msg, DOCOR 31-10-150, AFSSO SAC to AFSSO McCoy, JCS, et al., 31/2306Z Oct 62.
77. Msg, JCS 3147-62, JCS to AFSSO SAC, 1/0101Z Nov 62.
78. Omaha World Herald, 29 Oct 62.
79. Msg, JCS 3190-62, JCS to AFSSO SAC, 2/2009Z Nov 62.
80. Msg, Zippo 11-020, SAC to CONAD, CINCLANT, 1/0515Z Nov 62; Msg, DOCOR 3-11-16, AFSSO SAC to AFSSO McCoy, et al., 3/0810Z Nov 62.
81. Msg, SSOM 03-11-03, AFSSO McCoy to AFSSO SAC, 3/2147Z Nov 62.
82. Memo of telecon, Lt Col H. L. Laughlin, DOCOR, with Capt Dankworth, USN, Dep Ch, Joint Recon Center, JCS, 2/2315Z Nov 62; Msg, JCS 3200-62, JCS to AFSSO SAC, 3/0012Z Nov 62; Msg, DOCOR 4-11-26, AFSSO SAC to JCS, et al., 4/1503Z Nov 62 (execution order).
83. Hist of 4080SW, Special Operations 1 Nov-31 Dec 62, p 3, B-90726; Chart, "Mission Accomplishment 1 Nov-31 Dec 62," Ex 3, Hist of 4080SW, Special Operations 1 Nov-31 Dec 62, B-90726.
84. Msg, DOCOR 5-11-33, SAC to AFSSO McCoy, 5/0550Z Nov 62.
85. See map with plotted missions, in photo volume.
86. Report, "OL X Flying Time Nov 62," Ex 2, Hist of 4080SW, Special Operations Nov-Dec 62; also p 18 same history.
87. Briefing, "Cuban Threat Developments," presented to SAC Historical Staff by Capt R. C. Hicks, DIET, 22 Jan 63. This briefing with its accompanying photos is included in the photo volume of this history.

UNCLASSIFIED

UNCLASSIFIED

107

88. Ibid.; See also Statement by Robert S. McNamara, SecDef, Before the House Armed Services Committee on the Introduction of Offensive Weapons by the Soviet Union into Cuba, 30 Jan 63.

89. N.Y. Times, 20 Nov 62; Transcript of President's news conference, 20 Nov 62, in Wall Street Journal, 21 Nov 62.

90. Msg, JCS 7476, JCS to CINCLANT, 21/0009Z Nov 62, B-90710, Ex 12.

91. Msg, JCS 3533-62, JCS to AFSSO SAC, 22/0139Z Nov 62; Msg, JCS 3559-62, JCS to AFSSO SAC, 24/1705Z Nov 62; Msg, DOCOR 26-11-188, AFSSO SAC to JCS, 26/1650Z Nov 62.

92. Hist of 4080SW, Special Operations 1 Nov-31 Dec 62, p 7, B-90726.

93. Msg, JCS 7493, JCS to CINCLANT, et al., 21/1814Z Nov 62.

94. Msg, CINCLANT to JCS, 23/1825Z Nov 62.

95. Msg, JCS 7574, JCS to CINCLANT, 27/2053Z Nov 62. From this the conclusion must be drawn that low level missions were considered more provocative than the high altitude U-2 flights.

96. "Chronology of the Cuban Crisis," prepared by the Asst SecDef for Public Affairs, 14 Nov 62, p 10; Study, "Air Force Response to the Cuban Crisis," prepared by AFCHO, pp 9-10, B-90768.

97. Msg, CINCLANT to CSAF, 24/1614Z Oct 62, Ex 13. General LeMay also directed that SAC airborne alert B-52s report ship positions south of the 45° parallel and the information be furnished CINCLANT. (Msg, AFCVC 93003, Gen C. E. LeMay to Gen T. S. Power, 24/1900Z Oct 62.)

98. Msg, Zippo 10-435, SAC to 303ARS, Lajes Task Force, info 55SRW, 24/2115Z Oct 62, Ex 14; Msg, Zippo 10-442, SAC to 303ARS, Lajes Task Force, 24/2251Z Oct 62, Ex 15; Msg, Zippo 10-448, SAC to 303ARS, Lajes Task Force, 25/0229Z Oct 62, Ex 16.

99. Hist of 57AD, Oct 62, p 40; 16AF "Chronology of Events, Cuban Crisis, 22 Oct-28 Nov 62," Entry F2, 25 Oct 0730Z; Msg, Radnote, Comdr Det 1 Lajes to 98BW, Lincoln AFB, Nebr., 21 Nov 62, Ex 18, Hist of 98BW, Nov 62.

100. Interview, Robert M. Kipp, Historian, with Maj Richard Lawson, DOPL, 31 Jan 63.

101. Ibid.; Msg, Zippo 10-307, Det 1 Lajes to SAC, 25/1818Z Oct 62; Telephone conversation, Robert M. Kipp, Historian, with Maj H. F. Greenhow, DM3D2, 31 Jan 63.

UNCLASSIFIED

UNCLASSIFIED

102

102. Msg, BEXO 2-986, 818AD, Lincoln AFB, Nebr., to SAC (DXIH), 19/2246Z Feb 63; Hist of 57AD, Oct 62, p 40.
103. Msg, Zippo 10-447, SAC to 2AF, 25/0222Z Oct 62; Msg, Zippo 10-460, SAC to 2AF, 21SAD, 8AF, 25/0438Z Oct 62, Ex 17; Hist of 55SRW Dep Comdr for Ops, Oct 62, B-89856.
104. Hist of 55SRW Dep Comdr for Ops, Oct 62, B-89856; Msg, Zippo 10-460, SAC to 2AF, 21SAD, 8AF, 25/0438Z Oct 62, Ex 17; Msg, Zippo 10-448, SAC to 303 ARS, et al., 25/0229Z Oct 62, Ex 16; Msg, Zippo 10-475, SAC to 2AF, 25/0941Z Oct 62.
105. Msg, CINCLANT to SAC, 25/1730Z Oct 62.
106. Msg, JCS 6981, JCS to SAC, 25/1927Z Oct 62, Ex 18.
107. Msg, Zippo 10-586, SAC to 2AF, 25/2153Z Oct 62, Ex 19; Hist of 55SRW Dep Comdr for Ops, Oct 62, B-89856.
108. "Second AF Chronology of the Cuban Crisis," 12 Sep-27 Nov 62, DOCC Section, p 11 (search mission ordered by Gen Power 26/0200Z Oct); Hist of 55SRW Dep Comdr for Ops, Oct 62, B-89856; Msg, Zippo 10-544, 2AF to 21SAD, 26/0950Z Oct 62.
109. Hist of 55SRW Dep Comdr for Ops, Oct 62, B-89856.
110. Msg, Zippo 10-571, 2AF to 303ARS et al., 27/0305Z Oct 62; Msg, Zippo 10-561, 2AF to 303ARS, et al., 26/2005Z Oct 62.
111. Msg, Zippo 10-669, SAC to November (all command posts), 27/1225Z Oct 62; Msg, Zippo 10-775, CINCSAC to November, "Aircraft Accident," 29/1203Z Oct 62.
112. Msg, Zippo/Hot News/Fork 13/Outweigh to SAC, et al., 27/1233Z Oct 62 (this is an aircraft sighting report); Hist of 55SRW Dep Comdr for Ops, Oct 62, B-89856.
113. Msg, JCS 7043, JCS to SAC, 27/1837Z Oct 62, Ex 20.
114. Msg, Zippo 11-693, SAC to 2AF, 27/2245Z Oct 62; Msg, Zippo 10-595, 2AF to 303ARS, et al., 27/1631Z Oct 62; Hist of 55SRW Dep Comdr for Ops, Oct 62, B-89856; See also Ltr, Admiral George W. Anderson, CINCLANT, to Gen C. E. LeMay, CofS USAF, 26 Oct 62; 1st Ind (Ltr, Gen C. E. LeMay to SAC, 1 Nov 62), CINCSAC to 2AF, 23 Nov 62, Ex 21.
115. Msg, JCS 7043, JCS to SAC, 27/1837Z Oct 62; Msg, CINCLANT to SAC, "Blue Banner," 28/1950Z Oct 62; Msg, DOCOR 8591, SAC to 2AF, 29/2055Z Oct 62; Msg, Zippo 10-825, SAC to 2AF, 30/1853Z Oct 62.

UNCLASSIFIED

UNCLASSIFIED

109

116. Msg, AFOOP-SA 29-11-851, AFSSO USAF to AFSSO SAC, 29/1727Z Nov 62.

117. Remarks of the President at Presentation of Outstanding Unit Award to 4080th Strategic Reconnaissance Wing [sic] of the Strategic Air Command, Homestead AFB, Florida, 26 Nov 62, Ex 1, Hist of 4080SW, Special Operations 1 Nov-31 Dec 62, B-90726.

118. In speech to American Ordnance Association (Baltimore Sun, 6 Dec 62).

119. Memo for Gen Compton, from Col E. A. Powell, Ch, Recon Br, DO, "Reconnaissance Activity," 21 Jan 63, B-90995, Ex 22.

120. Hist of 4080SW Special Operations 1 Nov-31 Dec 62, pp 17-18, B-90726.

121. Remarks of the President at Presentation of Outstanding Unit Award to 4080th Strategic Reconnaissance Wing [sic] of the Strategic Air Command, Homestead AFB, Florida, 26 Nov 62, Ex 23.

122. See Award Citation, Ex 24; and Photo of ceremonies, in photo volume.

123. DAF SO G-143, 12 Dec 62.

124. Interview, Robert Kipp, Historian, with Brig Gen Robert N. Smith, DI, Hq SAC, 21 Jan 63.

125. Interview, E. R. Caywood, Historian, with Lt Col H. B. Bailey, Ch, DIMM, 13 Dec 62.

126. Ibid.; the statistics were taken from counters on the camera magazine of each U-2 sortie and compiled by Lt Col Bailey.

127. Interview, Robert M. Kipp, Historian, with Brig Gen Robert N. Smith, DI, Hq SAC, 21 Jan 63.

UNCLASSIFIED

UNCLASSIFIED

110

Chapter II

FOOTNOTES

1. Interview, John T. Bohn, Command Historian, with General Thomas S. Power, CINCSAC, 15 Nov 62.
2. IOM, Col George Matsko, Ex DPL, to DXIH, "Historical Coverage of Cuban Crisis," 9 Nov 62.
3. Atch 1, "Chronological Listing of Major Actions," to IOM, DOPIM to DXIH, "Historical Coverage of Cuban Crisis," 5 Nov 62.
4. Msg, DO 8195, SAC to 8AF, et al., "Aircraft Movement," 18/0114Z Oct 62, Ex 1.
5. Msg, DO B89208, SAC to CINCONAD, 19 Oct 62; Msg, DO B-89209, SAC to 8AF, 19 Oct 62; Msg, JCS 6761, JCS to CINCONAD, 18/2210Z Oct 62.
6. Msg, Zippo 10-251, SAC to 8AF, et al., 19/2015Z Oct 62, Ex 2.
7. Ibid.
8. Msg, JOPREP 10-043, SAC to JCS, 22 Oct 62.
9. Msg, Zippo 10-325, CINCSAC to 8AF, et al., 22/1625Z Oct 62; Msg, Zippo 10-329, SAC to 8AF and 306BW, 22/1727Z Oct 62; Msg, Zippo 10-389, SAC to 8AF and 4047SW, 24/0346Z Oct 62.
10. Msg, Zippo 10-265, SAC to 8AF et al., 20/0235Z Oct 62, Ex 3; Msg, Zippo 10-268, SAC to 19BW, 20/0510Z Oct 62, Ex 4; Msg, Zippo 10-282, SAC to 8AF et al., 20/1635Z Oct 62, Ex 5.
11. Msg, Zippo 10-325, CINCSAC to 8AF, et al., 22/1625Z Oct 62; Msg, Zippo 10-329, SAC to 8AF and 306BW, 22/1727Z Oct 62; Msg, Zippo 10-389, SAC to 8AF and 4047SW, 24/0346Z Oct 62.
12. IOM, Col George Matsko, Ex DPL, to DXIH, "Historical Coverage of Cuban Crisis," 9 Nov 62.
13. Msg, Zippo 10-258, SAC to 8AF et al., 19 Oct 62; Msg, Zippo 10-295, SAC to 8AF et al., 21 Oct 62.
14. Msg, DO 8195, SAC to 8AF et al., "Aircraft Movement," 18/0114Z Oct 62, Ex 1.

UNCLASSIFIED

~~UNCLASSIFIED~~

111

15. Msg, JOPREP 10-043, SAC to JCS, 22 Oct 62.

16. Msg, Zippo 10-284, SAC to November, 20/2020Z Oct 62, Ex 6; Msg, Zippo 10-291, SAC to Alfa Two, et al., 20/2300Z Oct 62, Ex 1, Chapter III.

17. Msg, Zippo 10-292, SAC to Alfa Two, et al., 20/2345Z Oct 62, Ex 7.

18. Msg, Zippo 10-284, SAC to November, 20/2020Z Oct 62, Ex 6; Msg, Zippo 10-291, SAC to Alfa Two, et al., 20/2300Z Oct 62, Ex 1, Chapter III; Msg, Zippo 10-292, SAC to Alfa Two, et al., 20/2345Z Oct 62, Ex 7.

19. IOM, Col E. P. Schwartztrauber, Ex IG, to DXIH, "Historical Coverage of Cuban Crisis," 2 Nov 62.

20. Msg, JCS 6857, JCS to CINCSAC, 22/1637Z Oct 62, Ex 8.

21. Msg, Zippo 10-326, CINCSAC to November, 22/1707Z Oct 62, Ex 9.

22. Msg, Zippo 10-332, SAC to Alfa 2 and Delta 2, 22/1815Z Oct 62, Ex 10.

23. Msg, JCS 6864, JCS to CINCAL, et al., 22/1809Z Oct 62, Ex 11; Msg, Zippo 10-247, SAC to November, 22/2307Z Oct 62.

24. Msg, JOPREP 10-050, SAC to JCS, 23 Oct 62.

25. Address, "Report to the People," by President John F. Kennedy, 22 Oct 62.

26. Msg, JCS 6917, JCS to SAC, 23/2340Z Oct 62; Msg, Zippo 10-398, SAC to JCS, 24/0750Z Oct 62, Ex 12.

27. "Defcon 3 Functions," extracted from SACM 55-7, 4 May 62, Ex 13.

28. "Defcon 2 Functions," extracted from SACM 55-7, 4 May 62, Ex 14.

29. Msg, JCS 6857, JCS to CINCSAC, 22/1637Z Oct 62, Ex 8.

30. Msg, Zippo 10-326, SAC to November, 22/1707Z Oct 62, Ex 9.

31. SAC OPORD 23-63, "Chrome Dome," 29 Jun 62.

32. Hist of SAC, Jul-Dec 61, pp 79-87.

33. SAC OPORD 23-63, "Chrome Dome," 29 Jun 62.

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112

34. Msg, JCS 6370, JCS to JUSMAG Madrid, 22/1840Z Oct 62, Ex 15. (SAC had previously requested confirmation that the JCS would so advise the Spanish JUSMAG [Msg, Zippo 10-330, SAC to JCS, 22/1725Z Oct 62].) ~~(S)~~ *u u*

35. SAC OPORD 23-63, "Chrome Dome," 29 Jun 62; Chart, "Airborne Alert Status," DO, 23 Oct 62 (Statistics taken from Control Center display panels by SAC Support Battle Staff historian); Chart, "1/3 Air Alert Recap," DO, 6 Nov 62.

36. Chart, "Tanker Task Force Build-up," DOPL, 23 Oct 62; Interview, Lynn Peake, Historian, with Maj C. L. Kimsey, DOOTD, Hq SAC, 6 Mar 63.

37. Chart, "Tanker Task Force Build-up," DOPL, 23 Oct 62; Chronology of 16AF in the Cuban Crisis.

38. Msg, DOOTD 8568, SAC to Alfa Two, et al., "Chrome Dome," 28 Oct 62.

39. Chart, "1/3 Air Alert Recap," DO, 6 Nov 62.

40. Msg, Zippo 10-418, SAC to Alfa Two, et al., 24/1806Z Oct 62, Ex 16; Msg, Zippo 10-428, SAC to Alfa Two, et al., 24/2021Z Oct 62, Ex 17.

41. Msg, DO 8486, SAC to 2AF, et al., 26/1930Z Oct 62, Ex 36 in Hist of 42BW, Oct 62.

42. SAC OPORD 23-63, "Chrome Dome," 29 Jun 62.

43. Msg, DOPL 8336, SAC to Alfa Two, et al., 23/1648Z Oct 62, Ex 35 in Hist of 42BW, Oct 62.

44. Atch 1, "Chronological Listing of Major Actions," to IOM, DOPLM to DXIH, "Historical Coverage of Cuban Crisis," 5 Nov 62.

45. Msg, Zippo 10-418, SAC to Alfa Two, et al., 24/1806Z Oct 62, Ex 16; Msg, Zippo 10-437, SAC to Alfa Two, et al., 24/2129Z Oct 62, Ex 18.

46. Msg, DO 8486, SAC to 2AF, et al., 26/1930Z Oct 62, Ex 36 in Hist of 42BW, Oct 62.

47. Msg, Zippo 11-166, SAC to Alfa Two, et al., 04/0240Z Nov 62, Ex 19.

48. Msg, Zippo 10-579, SAC to JCS, 25/2003Z Oct 62, Ex 20; Msg, Zippo 11-051, SAC to JCS, et al., for Taylor from Power, 01/2307Z Nov 62, Ex 21.

UNCLASSIFIED

SECRET

UNCLASSIFIED

113

49. Msg, Zippo 11-117, SAC to Alfa Two and Delta Three, "MK-28FI Alert," 02/0330Z Nov 62.
50. TS Supp to Hist of 4133SW, 20 Oct-27 Nov 62, pp 5-6.
51. Msg, Zippo 10-837, SAC to 15AF, "Weapons for Chrome Dome," 30/1200Z Oct 62.
52. Chart, "SAC Weapons Inventory through CY 1962," prep by Maj K. Kruse, DORQ, Hq SAC.
53. Msg, Zippo 11-033, 99BW to SAC, 2 Nov 62, Ex 21 in Hist of 99BW, Nov 62.
54. TOI, Col G. W. Thorpe, DDI, to DIAH, "Historical Coverage of Cuban Crisis," 5 Nov 62. (These actions are discussed below in the section on Force Generation and Status.)
55. Msg, Zippo 11-183, SAC to Alfa Two and Delta Three, 04/2023Z Nov 62, Ex 22; Msg, Zippo 11-243, SAC to Alfa Two, "Chrome Dome," 05/0536Z Nov 62, Ex 23.
56. Msg, Zippo 11-103, 8AF to SAC, 05/0131Z Nov 62.
57. Msg, Zippo 11-204, SAC to 8AF, 05/0532Z Nov 62; Msg, JOPREP 11-128, SAC to JCS and DIA, 05/1312Z Nov 62.
58. Chronology of 16AF in the Cuban Crisis.
59. Msg, C 1861, 16AF to SAC, "From General Wade to General Power," 28/0930Z Oct 62.
60. Msg, 95365, CSAF to 16AF, from General LeMay to General Wade, 10/1434Z Nov 62.
61. Msg, JCS 7473, JCS to CINCSAC, 20/2321Z Nov 62, Ex 24; Msg, Zippo 11-731, SAC to November, 21/0545Z Nov 62, Ex 25. (Although later the same day, SAC returned to a modified Defcon 3, the ground alert posture remained as previously amended on 15 November. See discussion of Force Generation and Status below.) (TS)
62. Msg, Zippo 11-745, SAC to Alfa Two, et al., 21/2116Z Nov 62, Ex 26.
63. Msg, DOOTO 9281, SAC to 16AF, et al., 21/2316Z Nov 62.
64. Msg, Zippo 11-881, SAC to CSAF, 28/1615Z Nov 62, Ex 27; See Ex 77, "Tactical Hours Flown," for a breakdown of all tactical aircraft flying hours during the period 22 Oct - 21 Nov 62.

UNCLASSIFIED

# UNCLASSIFIED

122

## Chapter IV

### FOOTNOTES

2. Report, "Planning and Actions in Support of CINCLANT Plan 312," 2 Nov 62, by DOCE.
3. DOCEOR Log, "Cuban Crisis."
4. Atch to ICA, DOCEPP to DDCI, 29 Nov 62, "EMC and On Call Circuit Activation/Deactivation," 29 Nov 62, Ex 1; DOCEOR Log (During Cuban Crisis), by DOCEOR; Report, "STN Circuits to Dispersed Locations," 2 Nov 62, by DOCE.
5. Report, "STN Circuits to Dispersed Locations," 2 Nov 62, by DOCE. These figures remain valid as of 27 Nov with the return to Desfeneen 4. Atch, "Supporting Communications for Current Situation," to Report, "Emergency Circuit Activations," 2 Nov 62, by DOCE.
6. Report, "Emergency Circuit Activations," 2 Nov 62, by DOCE.
7. Report, "Impact on Teletype Traffic," 2 Nov 62, by DOCE.
8. Msg, DOCE 8507, SAC to AFLO, "Return of SAC Mobile Multiplex Equipped Communications Vans," 2302Z 26 Oct 62, Ex 2; Report, "Inadequate Planning for Mobile Communications Facilities," 2 Nov 62, by DOCE.
9. Msg, DOCE 8507, SAC to AFLO, "Return of SAC Mobile Multiplex Equipped Communications Vans," 2302Z 26 Oct 62, Ex 2.
10. Msg, 62 MCSWP 2678, AFLO to AAMA, CSAF, SAC, et al., 26 Oct 62, Ex 3.
11. Report, "Deployment of SAC Vans to Des Moines and Circuitry Required," 26 Nov 62, by DOCE.
12. Msg, DOCE 8435, SAC to Alfa Two, 0250Z 25 Oct 62, Ex 4; Report, "Inclusion of the Collins Cedar Rapids Station into the SAC Short Order and Fast Talk Systems," 2 Nov 62, by DOCE.
13. Report, "Inclusion of Cedar Rapids Station into Short Order," 26 Nov 62, by DOCE.
14. DOCEOR Support Battle Staff Log, Cuban Crisis.

UNCLASSIFIED

UNCLASSIFIED

115

81. Msg, Zippo 10-743, SAC to Alfa Two and Alfa Three, 28/2338Z Oct 62, Ex 31.
82. Msg, Zippo 10-757, SAC to Alfa Two and Alfa Three, 29/0745Z Oct 62, Ex 32; Msg, Zippo 10-791, SAC to Alfa Two, et al., 29/2257Z Oct 62; Chart, "Additional Deployment, KC-97 Aircraft," DO, 31 Oct 62 (statistics taken from Control Center display panels by SAC Support Battle Staff historian).
83. Msg, Zippo 10-771, SAC to Alfa Two, et al., 29/1603Z Oct 62, Ex 33.
84. Msg, Zippo 10-772, SAC to Alfa Two, "Movement Order," 29/1625Z Oct 62, Ex 34; Msg, Zippo 10-780, SAC to Alfa Two, et al., "KC-97 Movement," 29/1924Z Oct 62.
85. Msg, Zippo 11-009, SAC to CSAF, "KC-97 Deployments," 01/0239Z Nov 62, Ex 35; Msg, Zippo 11-066, SAC to CSAF, "KC-97 Deployments," 02/0220Z Nov 62; Chart, "Additional Deployment, KC-97 Aircraft," DO, 30 Oct 62 (statistics taken from Control Center display panels by SAC Support Battle Staff historian).
86. Msg, Zippo 10-839, SAC to Alfa Two, et al., 30 Oct 62, Ex 36 in TS Supp to Hist of 4032 SW, Sep-Oct 62.
87. Msg, Zippo 10-860, SAC to SAF, 31/0621Z Oct 62; Msg, Zippo 11-016, SAC to Alfa Two, et al., 01/0403Z Nov 62; Msg, Zippo 11-041, SAC to Alfa Two, et al., 01/1802Z Nov 62; Msg, Zippo 11-096, SAC to Alfa Two, et al., 02/1250Z Nov 62.
88. Msg, Zippo 10-743, SAC to Alfa Two and Alfa Three, 28/2338Z Oct 62, Ex 31; Msg, Zippo 10-762, SAC to Alfa Two, 29/1010Z Oct 62, Ex 36.
89. Msg, Zippo 11-520, SAC to November, 15/0223Z Nov 62; Chart, "Sorties Recalled from Dispersal," DO, 16 Nov 62 (statistics taken from Control Center display panels by SAC Support Battle Staff historian); Msg, JOPREP 11-180, SAC to JCS and DIA, 17/2311Z Nov 62.
90. Msg, JCS 7542, JCS to CINCSAC, 24/1550Z Nov 62, Ex 37.
91. Msg, Zippo 11-804, SAC to November, 24/1814Z Nov 62, Ex 38; Msg, Zippo 11-805, SAC to JCS, 24/1820Z Nov 62, Ex 39; Msg, Zippo 11-806, SAC to 2AF, et al., 24/1815Z Nov 62, Ex 40. (SAC had previously dispatched detailed planning data/ground rules to be used when dispersed B-47s returned to home bases. [Msg, Zippo 11-226, SAC to Alfa Two, et al., "Redeployment of B-47s from Medium Force Dispersal Bases," 05/2318Z Nov 62, Ex 41; Msg, Zippo 11-269, SAC to Alfa Two, et al., 07/2120Z Nov 62].)

UNCLASSIFIED

92. Msg, Zippo 10-652, SAC to Alfa Two, et al., "Medium Force Dispersion," 27/0342Z Oct 62, Ex 23.

93. Hist of SAC, Jul-Dec 61, pp 74-75; Msg, AFCVNC 87543, Hq USAF to SAC, "Medium Force Dispersion," 11 May 62.

94. Msg, JCS 6917, JCS to SAC, 23/2340Z Oct 62.

95. Msg, Zippo 10-398, SAC to JCS, 24/0750Z, Oct 62, Ex 12.

96. Msg, Zippo 10-394, SAC to November, 24/0756Z Oct 62, Ex 42; "Defcon 2 Functions," extracted from SACM 55-7, 4 May 62, Ex 14.

97. Msg, DP 8331, SAC to Alfa Two, et al., "Personnel Actions," 22/2343Z Oct 62, Ex 43.

98. Msg, Zippo 10-394, SAC to November, 24/0756Z Oct 62, Ex 42.

99. Msg, DP 98017, SAC to Alfa Two, et al., 24/2225Z Oct 62, Ex 44.

100. Msg, DO B89775, SAC to CSEAF, 11 Nov 62.

101. Toid.

102. Msg, Zippo 10-394, SAC to November, 24/0756Z Oct 62, Ex 42.

103. Msg, Zippo 10-424, CINCSAC to November, 24/1914Z Oct 62, Ex 45; Msg, Zippo 10-578, SAC to Alfa Three, 25/1530Z Oct 62, Ex 46.

104. Msg, Zippo 10-743, SAC to Alfa Two and Alfa Three, 28/2338Z Oct 62, Ex 31.

105. Msg, Zippo 10-790, SAC to Alfa Two, et al., 29/2220Z Oct 62, Ex 47.

106. Atch 1, "Chronological Listing of Major Actions," to IOM, DOPIM to DXIH, Hq SAC, "Historical Coverage of Cuban Crisis," 5 Nov 62; Msg, Zippo 11-057, SAC to Alfa Two, et al., 02/0030Z Nov 62, Ex 48; Msg, Zippo 11-025, SAC to Elmendorf TF, et al., "EWO Assignments," 01/0715Z Nov 62, Ex 1 to TS Supp to Hist of 4158CSG, Nov 62.

107. Msg, Zippo 10-260, 16AF to SAC, 31/0100Z Oct 62; Msg, Zippo 10-849, SAC to 16AF, 31/0233Z Oct 62.

108. Chart, "7th Air Division Alert Reliability," in "Seventh Air Division in the Cuban Crisis, an Extract of Statistical Information," prep by DXIH, 7AD.

109. Msg, Zippo 11-071, SAC to 3AD, 02/0331Z Nov 62; Report, "SAC VI," 2 Nov 62.

110. TS Supp to Hist of 4158CSG, Nov 62.
111. Many B-47s were generated in excess of committed SIOP and assigned general reserve. (Msg, Zippo 11-023, SAC to Alfa Two, "General Reserve Force," 01/0602Z Nov 62, Ex 49; Msg, Zippo 11-057, SAC to Alfa Two, et al., 02/0030Z Nov 62, Ex 46; Msg, Zippo 11-073, SAC to Alfa Two, et al., 02/0355Z Nov 62, Ex 50; Msg, Zippo 11-283, SAC to Alfa Two, et al., 07/1604Z Nov 62, Ex 51.)
112. "Typhoon Karen Monograph," prep by DXIH, 3AD.
113. Msg, Zippo 11-362, SAC to Alfa Two, "Evacuation of B-47 Aircraft," 10/1642Z Nov 62; Chart, "B-47 Evacuation, Guam to Okinawa," DO, 11 Nov 62 (statistics taken from Control Center display panels by SAC Support Battle Staff historian); Msg, JOPREP 11-154, SAC to JCS and DIA, 11/2332Z Nov 62.
114. Msg, JOPREP 11-163, SAC to JCS and DIA, 17/2311Z Nov 62.
115. Report, "SAC V-1," 19 Oct 62.
116. Report, "SAC V-1," 4 Nov 62.
117. Msg, Zippo 10-879, SAC to Alfa Two, 31/1810Z Oct 62, Ex 52; Msg, Zippo 11-006, SAC to Alfa Two, 01/0229Z Nov 62, Ex 53.
118. Msg, Zippo 11-017, SAC to 2AF, "KC-135 Support," 01/0404Z Nov 62, Ex 54; Msg, Zippo 11-028, SAC to Alfa 2, 01/0936Z Nov 62, Ex 55.
119. Msg, Zippo 11-076, SAC to Alfa Two, 02/0516Z Nov 62, Ex 56.
120. Msg, Zippo 11-142, SAC to Alfa Two, 03/1830Z Nov 62, Ex 57.
121. Msg, Zippo 11-219, SAC to 2AF, et al., 05/1741Z Nov 62.
122. Report, "SAC V-1," 19 Oct 62.
123. Chart, "Force Status (Ground)," DO, Hq SAC, 4 Nov 62; Chart, "SAC Capability," DO, Hq SAC, 4 Nov 62 (statistics taken from Control Center display panels by SAC Support Battle Staff historian).
124. Interview, Robert Kipp, Historian, with Maj Gen K. K. Compton, DO, 3 Dec 62; Interview, John T. Bohn, Command Historian, with Maj Gen K. K. Compton, DO, 6 Dec 62.
125. Msg, AFOOP-CP-APD 92939, CSAF to SAC, et al., 24/0057Z Oct 62; Msg, AFOOP-CP-APD 92946, CSAF to SAC, et al., 24/0614Z Oct 62.
126. Msg, Zippo 10-399, SAC to CSAF, 24/0805Z Oct 62, Ex 58.

127. Msg, CINC B89693, SAC to JCS, "SAC Posture," 06/1730Z Nov 62, Ex 59.
128. Memo, "Proceedings of SAC Readiness Committee - Executive Session," by Lt Col R. M. Behr, DPL, Recorder, 9 Nov 62; Msg, DO 8937, SAC to Alfa Two, et al., "Phasedown," 09/2250Z Nov 62, Ex 60.
129. Msg, DO 8956, SAC to Alfa Two, et al., "Minimum Essential Tng," 10/1550Z Nov 62, Ex 61.
130. Msg, Zippo 11-409, SAC to Alfa Two, et al., 12/2335Z Nov 62, Ex 62.
131. Msg, Zippo 11-520, SAC to November, 15/0223Z Nov 62.
132. Msg, DP 101564, SAC to Alfa Two, et al., "Leave Policy," 8 Nov 62, Ex 63; Msg, DP 101523, SAC to Alfa Two, et al., "Resumption of B-52 and KC-135 CCTS," 08/2005Z Nov 62, Ex 21 in Hist of 4138SW, Nov 62.
133. Msg, JCS 7473, JCS to CINCSAC, 20/2321Z Nov 62, Ex 24; Msg, Zippo 11-731, SAC to November, 21/0545Z Nov 62, Ex 25.
134. Msg, CINC B-89943, CINCSAC to JCS, 21/1710Z Nov 62, Ex 64.
135. Msg, JCS 7493, JCS to CINCLANT, et al., 21/1803Z Nov 62, Ex 65; Msg, JCS 7502, JCS to CINCSAC, 21/2204Z Nov 62, Ex 66.
136. Msg, Zippo 11-751, SAC to JCS, 22/0055Z Nov 62, Ex 67; Msg, Zippo 11-750, SAC to November, 22/0050Z Nov 62, Ex 68.
137. Msg, JCS 7542, JCS to CINCSAC, 24/1550Z Nov 62, Ex 37; Msg, Zippo 11-804, SAC to November, 24/1614Z Nov 62, Ex 38; Msg, Zippo 11-805, SAC to JCS, 24/1820Z Nov 62, Ex 39; Msg, Zippo 11-810, SAC to November, 24/1850Z Nov 62, Ex 69.
138. Msg, Zippo 11-843, SAC to November, 26/2121Z Nov 62, Ex 70.
139. Msg, Zippo 11-869, SAC to November, 27/2315Z Nov 62, Ex 71; Msg, Zippo 11-870, SAC to JCS, et al., 27/2316Z Nov 62; Msg, Zippo 11-871, SAC to November, "Phasedown," 27/2342Z Nov 62, Ex 72; Msg, Zippo 11-875, SAC to November, 28/0018Z Nov 62, Ex 73.
140. Msg, JCS 7600, JCS to CINCLANT, 28/2249Z Nov 62, Ex 74; Msg, JCS 7601, JCS to SAC, 28/2314Z Nov 62; Msg, JCS 7602, JCS to CINCLANT, et al., 28/2322Z Nov 62, Ex 75.
141. Msg, Zippo 11-893, SAC to 8AF, et al., 29/0320Z Nov 62, Ex 76.

## Chapter III

## FOOTNOTES

1. SAC-1-V1 Report, 0900Z, 19 Oct 62.
2. Report, "Operational Launcher Status," by DM2, 0700Z, 22 Oct 62.
3. Msg, Zippo 10-291, SAC to Alfa Two, Golf Two, et al., 2300Z 20 Oct 62, Ex 1.
4. Msg, Zippo 10-320, SAC to Alfa Two, Golf Two, et al., 1033Z 22 Oct 62, Ex 2.
5. Msg, Zippo 10-369, SAC to Alfa Two and CSAF, 0347Z 23 Oct 62, Ex 3. See this document for a complete list of the 167 ICBM alert sorties.
6. Msg, Zippo 10-294, SAC to Alfa Two, et al., 0034Z 21 Oct 62, Ex 4.
7. Msg, Zippo 10-395, SAC to Alfa Two, et al., 0303Z, 24 Oct 62, Ex 5.
8. Report, "Liquid Oxygen/Liquid Nitrogen Conversion (ORT Missiles)," by DM3F, 26 Oct 62.
9. Ibid.; Msg, Zippo DM3F 10-385 for MACS, SAC to MAAMA, 24 Oct 62; Msg, DM 99016, SAC to MAAMA, 26 Oct 62.
10. Msg, DM4/DOOT 9059, SAC to NAFs, et al., 14 Nov 62, Ex 6.
11. Interview, H. S. Wolk, Historian, with Lt Col P. W. Saffold, DM4C, 17 Dec 62; Interview, H. S. Wolk, Historian, with Capt O. J. Howells, DM4C1, 17 Dec 62.
12. Msg, Zippo 10-412, SAC to BSD, 1630Z 24 Oct 62, Ex 7. The ECC Agreement was dated 4 May 61.
13. AFSC/SAC Agreement for Emergency Combat Capability of Ballistic Missile Launch Complexes, 4 May 61 (signed by Gen T. S. Power, CINCSAC, and Lt Gen B. A. Schriever, Comdr, AFSC), Ex 8.
14. IOM, DOPLM to Gen Crumm, "Missile Status," 26-29 Oct 62; Report, "Missile Status," 14 Nov 62, by DM4F; Interview, H. S. Wolk, Historian, with Lt Col W. Slagle, DM4F, 23 Nov 62.
15. Msg, Zippo 10-407, SAC to Alfa 2, et al., 1431Z 24 Oct 62, Ex 9.
16. Reports, "Operational Launcher Status," by DM2, 22 Oct - 20 Nov 62.

17. "Force Status Ground," 1400Z, 3 Nov 62, SAC Command Post Board.

18. Report, "Operational Launcher Status," by DM2, 0700, 29 Nov 62.

19. Interview, H. S. Wolk, Historian, with Brig Gen K. R. Powell, Dep DM, 3 Dec 62; Interview, H. S. Wolk, Historian, with Lt Col W. Slagle, DM4F, 23 Nov 62; Interview, Robert Kipp, Historian, with Maj Gen K. K. Compton, DO, 3 Dec 62.

20. Ltr, Gen T. S. Power, CINCSAC, to Hq USAF (AFCCS), "Missile Items," 20 Nov 62, Ex 10.

21. Ltr, Gen T. S. Power, CINCSAC, to Gen B. A. Schriever, Comdr AFSC, "Teamwork, Missile Force Generation," 19 Nov 62, Ex 11.

22. Msg, AFSDC-S 93536, Hq USAF to SAC & AFSC, 29 Oct 62, Ex 12; Interview, H. S. Wolk, Historian, with Lt Col W. Slagle, DM4F, 23 Nov 62.

23. Msg, AFSDC-S 93536, Hq USAF to SAC & AFSC, 29 Oct 62, Ex 12.

24. Msg, BSC-29-10-21, BSD to SAC, personal to Gen Harris fr Gen Davis, 29 Oct 62, Ex 13.

25. Ibid.

26. Msg, MC 8696, SAC to CSAF & BSD, 30 Oct 62, Ex 14.

27. Msg, DM 8788, SAC to AFSC, BSD, et al., 3 Nov 62, Ex 15.

28. Msg, DO/DM 8828, SAC to AFSC, BSD & Alfa Two, 5 Nov 62, Ex 16.

29. Msg, DM 101977, SAC to SBAMA, 2AF & 15AF, "Arma Guidance Mod - Project Draw Tite," 7 Nov 62, Ex 17.

30. Msg, DO 8937, SAC to Alfa Two, et al., 2250Z 9 Nov 62, Ex 18.

31. Msg, DM4/DOOT 9059, SAC to NAFs, et al., 14 Nov 62, Ex 6; Interview, H. S. Wolk, Historian, with Lt Col P. Safford, DM4C, 17 Dec 62; Interview, H. S. Wolk, Historian, with Capt O. J. Howells, DM4C1, 17 Dec 62.

32. Msg, DO 9026, SAC to Alfa Two, et al., "Atlas F Phase III ORT," 14 Nov 62, Ex 19; Msg, DM4/DOOT 9059, SAC to NAFs, et al., 14 Nov 62, Ex 6.

33. Msg, DOOTPF 9317, SAC to 15AF, 23 Nov 62, Ex 20.

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34. Msg, BSB 1-11-1, BSD to SAC, 1833Z 1 Nov 62, Ex 21; Msg, DM4C 9039, SAC to 8AF & 15AF, 14 Nov 62; Msg, SAC to BSD, DM4C 9077, 1920Z 15 Nov 62, Ex 22.
35. Msg, Zippo 11-874, SAC to Alfa Two, Golf Two, et al., "Missile Alert Posture," 0015Z 28 Nov 62.
36. Msg, Zippo 10-119, 341st SW to SAC, SAC-VI, Sup #6, 27/1445Z Oct.
37. Msg, Zippo 10-172, 394th SMS to SAC, SAC-VI, Sup #3, 27/1635Z Oct 62.
38. Msg, Zippo 10-133, SAC-VI Sup #7, 28/1832Z Oct 62; Msg, Zippo 10-192, SAC-VI Sup #6, 28/0651Z Oct 62.
39. Msg, DO/DX 8519, SAC to BSD & 15AF, "Technical Evaluation of Malmstrom Flight 'A,'" 26 Oct 62, Ex 23.
40. Msg, Zippo DO 10-679, SAC to 1 StratAD & BSD, 1827Z 27 Oct 62, Ex 24.
41. Msg, BSQ 27-10-295, BSD to SAC, "Technical Evaluation of Malmstrom Flight Alpha," 2215Z 27 Oct 62, Ex 25.
42. Msg, BSQ-30-10-26, BSD to SAC, "Technical Evaluation of Malmstrom Flight A," 0111Z 31 Oct 62, Ex 26.
43. IOM, DOOTSM to DOOT, "SMES Report of Special Visit to 341st SW," 9 Nov 62.
44. Msg, DOOTPT 8088, SAC to 2AF, 8AF & 820 StratAD, "Alert Crew Manning Contingency Plan," 13 Oct 62, Ex 27; Interview, H. S. Wolk, Historian, with Lt Col B. Poe, DOOTPT, 3 Dec 62.
45. Msg, DOOT 8470, SAC to 2AF & 8AF, "Alert Crew Manning Contingency Plan," 25 Oct 62; Msg, DOOTPT 8606, SAC to 15AF, "Atlas F MCC Manning Contingency Plan," 29 Oct 62; Msg, DOOT 6635, SAC to 1st StratAD & 8AF, "Atlas F MCC Support for 556SMS," 30 Oct 62, Ex 28; Interview, H. S. Wolk, Historian, with Lt Col B. Poe, DOOTPT, 3 Dec 62.
46. Msg, DOOT 6635, SAC to 1st StratAD & 8AF, "Atlas F MCC Support for 556 SMS," 30 Oct 62, Ex 28.
47. Interview, H. S. Wolk, Historian, with Lt Col B. Poe, DOOTPT, 3 Dec 62.

UNCLASSIFIED

122

48. Ltr, Gen T. S. Power, CINCSAC, to Hq USAF (AFCCS), "Missile Items," 20 Nov 62, Ex 10.
49. Msg, DO 9008, SAC to 15AF, "Resumption of Unit ORT," 13 Nov 62, Ex 29; Interview, H. S. Wolk, Historian, with Lt Col B. Poe, DOOTPF, 3 Dec 62.
50. IOM, DOOTPF to DOOT, "Atlas F Operational Readiness Training (ORT)," 9 Nov 62; Interview, H. S. Wolk, Historian, with Lt Col B. Poe, DOOTPF, 3 Dec 62.
51. Msg, DOOT 8438, SAC to Alfa Two, et al., "Training & Standardization," 25 Oct 62.
52. Interview, H. S. Wolk, Historian, with Maj J. H. Hiley, DOOTTA, 28 Nov 62.
53. Report, "Operational Launcher Status," by DM2, 22 Oct-20 Nov 62.
54. Interview, H. S. Wolk, Historian, with Brig Gen K. R. Powell, Dep DM, 3 Dec 62.

UNCLASSIFIED

# UNCLASSIFIED

123

## Chapter IV

### FOOTNOTES

1. Report, "Planning and Actions in Support of CINCLANT Plan 312," 2 Nov 62, by DOCE.
2. DOCEOR Log, "Cuban Crisis."
3. Atch to ICA, DOCEPP to DIAH, 29 Nov 62, "EMC and On Call Circuit Activation/Deactivation," 29 Nov 62, Ex 1; DOCEOR Log (During Cuban Crisis), by DOCEOR; Report, "STN Circuits to Dispersed Locations," 2 Nov 62, by DOCE.
4. Report, "STN Circuits to Dispersed Locations," 2 Nov 62, by DOCE.
5. These figures remain valid as of 27 Nov with the return to C b1 J Atch, "Supporting Communications for Current Situation," to Report, "Emergency Circuit Activations," 2 Nov 62, by DOCE.
6. Report, "Emergency Circuit Activations," 2 Nov 62, by DOCE.
7. Report, "Impact on Teletype Traffic," 2 Nov 62, by DOCE.
8. Msg, DOCE 8507, SAC to AFLC, "Return of SAC Mobile Multiplex Equipped Communications Vans," 2302Z 26 Oct 62, Ex 2; Report, "Inadequate Planning for Mobile Communications Facilities," 2 Nov 62, by DOCE.
9. Msg, DOCE 8507, SAC to AFLC, "Return of SAC Mobile Multiplex Equipped Communications Vans," 2302Z 26 Oct 62, Ex 2.
10. Msg, 62 MCSWP 2878, AFLC to AAMA, CSAF, SAC, et al., 26 Oct 62, Ex 3.
11. Report, "Deployment of SAC Vans to Des Moines and Circuitry Required," 26 Nov 62, by DOCE.
12. Msg, DOCE 8435, SAC to Alfa Two, 0250Z 25 Oct 62, Ex 4; Report, "Inclusion of the Collins Cedar Rapids Station into the SAC Short Order and Fast Talk Systems," 2 Nov 62, by DOCE.
13. Report, "Inclusion of Cedar Rapids Station into Short Order," 26 Nov 62, by DOCE.
14. DOCEOR Support Battle Staff Log, Cuban Crisis.

UNCLASSIFIED

UNCLASSIFIED

124

14. Msg, Zippo 10-469, SAC to November, "Radio Monitor Requirements at Current B-47 Dispersal Bases," 0630Z 25 Oct 62, Ex 5.
15. Report, "Back-Up Radio Communications With Dispersed Bases," 26 Nov 62, by DOCE.
16. Msg, DOCE 8576, SAC to November, "MF SSB Monitor Requirement at B-47 Dispersal Bases," 1000Z 25 Oct 62, Ex 6.
17. Report, "Back-Up Radio Communications With Dispersed Bases," 26 Nov 62, by DOCE; Procedures for spares support of MRA-2 SSB equipment were outlined in Msg DOCE 8565, SAC to NAFs, 1830Z 26 Oct 62, Ex 7.
18. Msg, Zippo 10-597, SAC to November, "Operational Procedures for SSB MF at Dispersal Sites," 0253Z 26 Oct 62, Ex 8; Msg, Zippo 10-715, SAC to NAFs, 1050Z, 28 Oct 62, Ex 9; Msg, Zippo 10-758, SAC to Alfa Two, 0811Z 29 Oct 62, Ex 10.
19. Interview, H. S. Wolk, Historian, with Maj R. H. Drollingen, DOCEOR, 30 Jan 63; Report, "Method of Confirming Radio Contacts with Dispersed Bases," 2 Nov 62, by DOCE.
20. Msg, Zippo 11-363, SAC to November, 1648Z 10 Nov 62, Ex 11.
21. Report, "Provision of SSB Facilities to Dispersal Bases," 2 Nov 62, by DOCE; Report, "Back-Up Radio Communications With Dispersed Bases," 26 Nov 62, by DOCE.
22. Report, "Inadequacy of Cpt Orders as Applied to Crews and Communications at the Dispersed Bases," 2 Nov 62, by DOCE.
23. Report, "Procedures Written and Disseminated After Deployment to Dispersal Bases," 2 Nov 62, by DOCE.
24. See Msg, ALSACCOMSTA 8575, SAC to ALSACCOMSTA, 29 Oct 62, Ex 12, for list of dispersal locations and routing indicators for classified teletype communications.
25. Interview, H. S. Wolk, Historian, with Capt J. W. Petuskey, DOCEOT, 29 Nov 62; Report, "Lack of Crypto Facilities at Dispersal Bases," 2 Nov 62, by DOCE.
26. Report, "Falling Leaf," 2 Nov 62, by DOCE.
27. Excluded.

UNCLASSIFIED

UNCLASSIFIED

125

39. Msg, Zippo 10-730, SAC to NORAD, NORAD LO, 1847Z 28 Oct 62, Ex 13; "Tailing Lead" Log, DOCEM, 29 Oct 62; Msg, Zippo 10-732, SAC to Alfa Two, "Ballistic Missile Warning," 1953Z 28 Oct 62, Ex 14.
40. Msg, Zippo 11-143, 1647Z 28 Oct 62, "Chrome Dome Interference Reports," 2053Z 5 Nov 62.
41. Msg, Zippo 10-632, SAC to Delta Three, 1844Z 27 Oct 62; Msg, Zippo 11-127, SAC to Alfa Two, 1850Z 28 Oct 62; Msg, Zippo 10-795, SAC to November, 30 Oct 62, Ex 15.
42. Msg, JCS 7022, JCS to CINCLANT, et al., 2159Z, 26 Oct 62, Ex 16.
43. Report, "Analysis of Scoring and Jamming Reports," 2 Nov 62, by DOCE.
44. Interview, H. S. Wolk, Historian, with Brig Gen G. T. Gould, Jr., Dir C-2, Hq SAC, 26 Nov 62.

UNCLASSIFIED

UNCLASSIFIED

126

Chapter V

FOOTNOTES

1. Msg, CASD/PA, DEF 320423, OSD to Sec of Army, CINCSAC, et al., 24 Oct 62, Ex 1.
2. Msg, DXP-1 8347, SAC to ALPA IWC, et al., 23 Oct 62.
3. Msg, DIXI 8750, SAC to OSAF, for SAFOI-1, 2 Nov 62, Ex 2; Msg, DIXI 8749, SAC to OSAF, for SAFOI-1, 2 Nov 62, Ex 3; Msg, DIXI 8764, SAC to OSAF, for SAFOI-1, 2 Nov 62, Ex 4; Msg, DIXI 8765, SAC to OSAF, for SAFOI-1, 2 Nov 62, Ex 5.
4. Msg, SAFOI 94584, personal Gen Martin to Gen T. S. Power, CINCSAC, 5 Nov 62.
5. Ltr, Gen T. S. Power, CINCSAC, to Hon. R. S. McNamara, SecDef, 7 Nov 62, Ex 6.
6. Ibid.
7. DOD News Release No. 1942-62, "Actions of Military Services in Cuban Crisis Outlined," 29 Nov 62.

UNCLASSIFIED

UNCLASSIFIED

127

## Chapter VI

### FOOTNOTES

1. This section represents a summation of command achievements and problems during the Cuban crisis. It is based on the detailed investigation contained in the preceding portions of this narrative and on a special study conducted by Headquarters SAC. In a message of 7 December SAC required its subordinate units to prepare a report of problems encountered and to recommend ways to solve them. A file of the reports made by individual units to the numbered air forces, the numbered air forces (and overseas air divisions) report to SAC headquarters, and the SAC analysis prepared by DCR is on file in the SAC archives.
2. Baltimore Sun (Speech by General LeMay before the American Ordnance Association), 6 Dec 62.
3. Washington Post, 8 Dec 62.

UNCLASSIFIED

EXHIBITSVOLUME 111Chapter 1

1. Msg, DOCOM 384763, SAC to 2AF, et al., 12/2040Z Sep 62.
2. Msg, DODIN 2AF-62-1360, 2AF to 2IAD, et al., 15/1520Z Sep 62, B-84809.
3. 553RW Recapitulations of Common Cause, Blue Ink, Blue Banner, and Baby Bonnet sorties.
4. Msg, DOCOM 385143, SAC to 2AF, et al., 13/2314Z Oct 62.
5. Msg, CINPAC 10-804, SAC to AFSC, et al., 29/0630Z Oct 62.
6. Msg, AFSC-12-10-533, USAF to SAC, 12/1910Z Oct 62.
7. Msg, VC 28-10-125, SAC to USAF, 28/1727 Oct 62, B-90912.
8. Msg, Zippo 11-103, SAC to Armed Forces Institute of Pathology, 02/1938Z Oct 62.
9. Ltr, Armed Forces Institute of Pathology to CINCSAC, "Autopsy Report on Major Rudolf Anderson, Jr., USAF," 28 Dec 62.
10. Msg, DOCOR B39365, SAC to COMCINWESTFOR, 24/1300Z Oct 62.
11. Msg, JCS 3144-62, JCS to SAC, et al., 31/2345Z Oct 62, B-90914.
12. Msg, JCS 7476, JCS to CINCLANT, 21/0009Z Nov 62, B-90710.
13. Msg, CINCLANT to CSAF, 24/1614Z Oct 62.
14. Msg, Zippo 10-435, SAC to 303ARS, Lajes Task Force, 24/2115Z Oct 62.
15. Msg, Zippo 10-442, SAC to 303ARS, Lajes Task Force, 24/2251Z Oct 62.
16. Msg, Zippo 10-448, SAC to 303ARS, Lajes Task Force, 23W, 25/0229Z Oct 62.
17. Msg, Zippo 10-460, SAC to 2AF, et al., 25/0438Z Oct 62.
18. Msg, JCS 6981, JCS to CINCSAC, 25/1927Z Oct 62, B-90711.

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UNCLASSIFIED

129

17. Msg. Zippo 10-585, SAC to SAF, RISAD. 968PW, 25/2104Z Oct 62.
18. Msg, JCS 7043, JCS to CINCSAC, 27/1837Z Oct 62.
19. Ltr, Gen C. E. Lefley, Corps USAF, to SAC, "Commendation," 1 Nov 62; 1st Ind, SAC to USAF, 25 Nov 62; Atch 1, Ltr, Adm George W. Anderson, CNO, to Gen C. E. Lefley, Corps USAF, 28 Oct 62.
20. Memo for Gen Campbell, from Col E. A. Powell, "Reconnaissance Activity," 21 Jan 63, w/1 Recd, Individual Mission Summary, B-90951.
21. Remarks of the President at Presentation of Outstanding Unit Award to 4080th Strategic Reconnaissance Wing [sic] of the Strategic Air Command, Homestead Air Force Base, Florida, 26 Nov 62.
22. Outstanding Unit Award, 4080SW, 24 Nov 62.

Chapter 27

1. Msg, DO S195, SAC to SAF, et al., "Aircraft Movement," 16/0114Z Oct 62.
2. Msg, Zippo 10-251, SAC to SAF, et al., 19/2015Z Oct 62, B-89970.
3. Msg, Zippo 10-265, SAC to SAF, et al., 20/0235Z Oct 62, B-89969.
4. Msg, Zippo 10-263, SAC to 193W, 20/0510Z Oct 62, B-90160.
5. Msg, Zippo 10-282, SAC to SAF, et al., 24/1635Z Oct 62, B-89968.
6. Msg, Zippo 10-284, SAC to November, 20/2020Z Oct 62, B-89967.
7. Msg, Zippo 10-292, SAC to Alfa Two, et al., 20/2345Z Oct 62, B-89973.
8. Msg, JCS 6857, JCS to SAC, 22/1637Z Oct 62, B-89283.
9. Msg, Zippo 10-326, CINCSAC to November, 22/1707Z Oct 62.
10. Msg, Zippo 10-332, SAC to Alfa 2 and Delta 2, 22/1815Z Oct 62, B-89971.
11. Msg, JCS 6864, JCS to CINCPAC, et al., 22/1809Z Oct 62, B-89978.
12. Msg, Zippo 10-398, SAC to JCS, 24/0750Z Oct 62.
13. "Defcon 3 Functions," extracted from SACM 55-7, 4 May 62.
14. "Defcon 2 Functions," extracted from SACM 55-7, 4 May 62.

UNCLASSIFIED

15. Msg, JCS 6870, JCS to JUSMAG Spain, 22/1840Z Oct 62, B-89286.
16. Msg, Zippo 10-418, SAC to Alfa Two, et al., 24/1806Z Oct 62.
17. Msg, Zippo 10-428, SAC to Alfa Two, et al., 24/2021Z Oct 62.
18. Msg, Zippo 10-437, SAC to Alfa Two, et al., 24/2129Z Oct 62.
19. Msg, Zippo 11-166, SAC to Alfa Two, et al., 04/0240Z Nov 62.
20. Msg, Zippo 10-579, SAC to JCS, 25/2003Z Oct 62.
21. Msg, Zippo 11-051, SAC to JCS, et al., 01/2307Z Nov 62, B-90159.
22. Msg, Zippo 11-188, SAC to Alfa Two and Delta Three, 04/2023Z Nov 62.
23. Msg, Zippo 11-073, SAC to Alfa Two, 01/0635Z Nov 62.
24. Msg, JCS 7473, JCS to CINCSAC, 20/2330Z Nov 62.
25. Msg, Zippo 11-731, SAC to November, 21/0545Z Nov 62.
26. Msg, Zippo 11-745, SAC to Alfa Two, et al., 21/2116Z Nov 62.
27. Msg, Zippo 11-881, SAC to CSAF, 26/1615Z Nov 62, B-90153.
28. Chart, "B-47 Dispersal," Oct 62.
29. Msg, Zippo 10-652, SAC to Alfa Two, et al., "Medium Force Dispersal," 27/0342Z Oct 62.
30. Msg, Zippo 10-596, SAC to November, 26/0251Z Oct 62.
31. Msg, Zippo 10-743, SAC to Alfa Two and Alfa Three, 28/2338Z Oct 62.
32. Msg, Zippo 10-757, SAC to Alfa Two and Alfa Three, 29/0745Z Oct 62.
33. Msg, Zippo 10-771, SAC to Alfa Two, et al., 29/1603Z Oct 62.
34. Msg, Zippo 10-772, SAC to Alfa Two, 29/1625Z Oct 62.
35. Msg, Zippo 11-009, SAC to CSAF, "KC-97 Deployments," 01/0239Z Nov 62.
36. Msg, Zippo 10-762, SAC to Alfa Two, 29/1010Z Oct 62.
37. Msg, JCS 7542, JCS to CINCSAC, 24/1554Z Nov 62, B-90158.

38. Msg, Zippo 11-804, SAC to November, 24/1814Z Nov 62, B-90010.

39. Msg, Zippo 11-805, SAC to JCS, 24/1820Z Nov 62, B-90157.

40. Msg, Zippo 11-806, SAC to 2AF, et al., 24/1815Z Nov 62.

41. Msg, Zippo 11-226, SAC to Alfa Two, et al., "Redeployment of B-47's From Medium Force Dispersal Bases," 05/2318Z Nov 62.

42. Msg, Zippo 10-394, SAC to November, 24/0756Z Oct 62, B-89975.

43. Msg, DP 8331, SAC to Alfa Two, et al., "Personnel Actions," 22/2343Z Oct 62.

44. Msg, DP 98017, SAC to Alfa Two, et al., 24/2225Z Oct 62.

45. Msg, Zippo 10-424, SAC to November, 24/1914Z Oct 62.

46. Msg, Zippo 10-578, SAC to Alfa Three, 25/1530Z Oct 62.

47. Msg, Zippo 10-790, SAC to Alfa Two, et al., 29/2220Z Oct 62.

48. Msg, Zippo 11-057, SAC to Alfa Two, et al., 02/0030Z Nov 62.

49. Msg, Zippo 11-023, SAC to Alfa Two, 01/0602Z Nov 62.

50. Msg, Zippo 11-073, SAC to Alfa Two, et al., 02/0355Z Nov 62.

VOLUME IV

Chapter II - Continued

51. Msg, Zippo 11-283, SAC to Alfa Two, et al., 7/1604Z Nov 62.

52. Msg, Zippo 10-879, SAC to Alfa Two, 31/1810Z Oct 62.

53. Msg, Zippo 11-006, SAC to Alfa Two, 01/0229Z Nov 62.

54. Msg, Zippo 11-017, SAC to 2AF, "KC-135 Support," 01/0404Z Nov 62.

55. Msg, Zippo 11-028, SAC to Alfa Two, 1/0936Z Nov 62.

56. Msg, Zippo 11-076, SAC to Alfa Two, 02/0516Z Nov 62.

57. Msg, Zippo 11-142, SAC to Alfa Two, 03/1630Z Nov 62.

58. Msg, Zippo 10-399, SAC to CSAF, 24/0805Z Oct 62, B-89979.

59. Msg, CINC B89693, SAC to JCS, 06/1730Z Nov 62.
60. Msg, DO 8937, SAC to Alfa Two, et al., 09/2250Z Nov 62.
61. Msg, DO 8956, SAC to Alfa Two, et al., 10/1550Z Nov 62.
62. Msg, Zippo 11-409, SAC to Alfa Two, et al., 12/0320Z Nov 62.
63. Msg, DP 101564, SAC to Alfa Two, et al., 8 Nov 62.
64. Msg, CINC B-89943, SAC to JCS, 21/1710Z Nov 62.
65. Msg, JCS 7493, JCS to CINCLANT, et al., 21/1803Z Nov 62.
66. Msg, JCS 7502, JCS to CINCSAC, 21/2204Z Nov 62.
67. Msg, Zippo 11-751, SAC to JCS, 22/0055Z Nov 62.
68. Msg, Zippo 11-750, SAC to November, 22/0050Z Nov 62, B-89989.
69. Msg, Zippo 11-810, SAC to November, 24/1850Z Nov 62.
70. Msg, Zippo 11-843, SAC to November, 26/2121Z Nov 62, B-90155.
71. Msg, Zippo 11-869, SAC to November, 27/2315Z Nov 62.
72. Msg, Zippo 11-871, SAC to November, 27/2362Z Nov 62.
73. Msg, Zippo 11-875, SAC to November, 28/0018Z Nov 62.
74. Msg, JCS 7600, JCS to CINCLANT, 28/2249Z Nov 62, B-90162.
75. Msg, JCS 7602, JCS to CINCLANT, et al., 28/2322Z Nov 62, B-90161.
76. Msg, 11-893, SAC to 8AF, et al., 29/0320Z Nov 62, B-90152.
77. "Tactical Hours Flown," 22 Oct - 21 Nov 62.

### Chapter III

1. Msg, Zippo 10-291, SAC to Alfa Two, et al., 20/2300Z Oct 62, B-89966.
2. Msg, Zippo 10-320, SAC to Alfa Two, et al., 22/1033Z Oct 62, B-89972.
3. Msg, Zippo 10-369, SAC to Alfa Two and CSAF, 23/0847Z Oct 62, B-89974.

4. Msg, Zippo 10-294, SAC to Alfa Two, et al., 21/0034Z Oct 62.
5. Msg, Zippo 10-395, SAC to Alfa Two, et al., 24/0803Z Oct 62.
6. Msg, DM/DOOT 9059, SAC to NAFs, et al., 14 Nov 62.
7. Msg, Zippo 10-412, SAC to BSD, 24/1630Z Oct 62, B-89976.
8. AFSC/SAC Agreement for Emergency Combat Capability of Ballistic Missile Launch Complexes, 4 May 61.
9. Msg, Zippo 10-407, SAC to Alfa Two, et al., 24/1431Z Oct 62.
10. Ltr, Gen T. S. Power, CINCSAC, to Hq USAF (AFCCS), "Missile Items," 20 Nov 62.
11. Ltr, Gen T. S. Power, CINCSAC, to Gen B. A. Schriever, Comdr AFSC, "Teamwork, Missile Force Generation," 19 Nov 62.
12. Msg, AFSDC-S 93536, Hq USAF to SAC & AFSC, 29 Oct 62.
13. Msg, BSG-29-10-21, BSD to SAC, 29 Oct 62.
14. Msg, VC 8696, SAC to CSAF and BSD, 30 Oct 62.
15. Msg, DM 8788, SAC to AFSC, et al., 3 Nov 62.
16. Msg, DO/DM 8828, SAC to AFSC, BSD & Alfa Two, 5 Nov 62.
17. Msg, DM 101977, SAC to SBAMA, 2AF, 15AF, "Arma Guidance Mod - Project Draw Tite," 9 Nov 62.
18. Msg, DO 8937, SAC to Alfa Two, et al., 2250Z 9 Nov 62.
19. Msg, DO 9026, SAC to Alfa Two, et al., "Atlas F Phase III ORT," 14 Nov 62.
20. Msg, DOOTPT 9317, SAC to 15AF, 23 Nov 62.
21. Msg, BSB 1-11-1, BSD to SAC, 1 Nov 62.
22. Msg, DM 9077, SAC to BSD, 15 Nov 62.
23. Msg, DO/DM 8519, SAC to BSD & 15AF, "Technical Evaluation of Malmstrom Flight 'A,'" 26 Oct 62.
24. Msg, Zippo 10-679, SAC to 1st StratAD & BSD, 1827Z 27 Oct 62.
25. Msg, BSQ 27-10-295, BSD to SAC, "Technical Evaluation of Malmstrom Flight Alpha," 2215Z 27 Oct 62.

26. Msg, BSQ-30-10-26, BSD to SAC, "Technical Evaluation of Malmstrom Flight A," 0111Z 31 Oct 62.
27. Msg, DOOTPT 8088, SAC to 2AF, 8AF & 820 StratAD, "Alert Crew Manning Contingency Plan," 13 Oct 62.
28. Msg, DOOT 8635, SAC to 1 StratAD & 8AF, "Atlas F MCC Support for 556 SMS," 30 Oct 62.
29. Msg, DO 9008, SAC to 15AF, "Resumption of Unit ORT," 13 Nov 62.

#### Chapter IV

1. IOM, DOCEPP to DXIH, "Circuit Activation-Deactivation Schedule - Cuban Crisis," 29 Nov 62, w/Atch 1, "EMC and On-Call Circuit Activation/Deactivation."
2. Msg, DOCE 8507, SAC to AFLC, "Return of SAC Mobile Multiplex Equipped Communications Vans," 2302Z 26 Oct 62.
3. Msg, 62 MCSWP 2878, AFLC to AAMA, et al., 26 Oct 62.
4. Msg, DOCE 8435, SAC to Alfa Two, 0250Z 25 Oct 62.
5. Msg, Zippo 10-469, SAC to November, "Radio Monitor Requirements at Current B-47 Dispersal Bases," 25/0638Z Oct 62.
6. Msg, DOCE 98476, SAC to Alfa Two, "HF SSB Monitor Requirement At B-47 Dispersal Bases," 2010Z 25 Oct 62.
7. Msg, DOCOR 8565, SAC to NAFs, 1830Z 28 Oct 62.
8. Msg, Zippo 10-597, SAC to November, 26/0253Z Oct 62.
9. Msg, Zippo 10-715, SAC to NAFs, 28/1050Z Oct 62.
10. Msg, Zippo 10-758, SAC to Alfa Two, 29/0811Z Oct 62.
11. Msg, Zippo 11-363, SAC to November, 10/1648Z Nov 62.
12. Msg, ALSACCOMSTA 8575, SAC to ALSACCOMSTA, 29 Oct 62.
13. Msg, Zippo 10-730, SAC to NORAD, NORAD LO, 28/1847Z Oct 62.
14. Msg, Zippo 10-732, SAC to Alfa Two, 28/1953Z Oct 62.

SEARCHED

135

15. Msg, Zippo 10-795, SAC to November, 30 Oct 62.
16. Msg, JCS 7022, JCS to CINCLANT, et al., 26/2159Z Oct 62.

Chapter V

1. Msg, DEF 320423, OSD to Sec of Army, CINCSAC, et al., 24 Oct 62.
2. Msg, DXI 8750, SAC to OSAF, for SAFOI-1, 2 Nov 62.
3. Msg, DXI 8749, SAC to OSAF, for SAFOI-1, 2 Nov 62.
4. Msg, DXI 8764, SAC to OSAF, for SAFOI-1, 2 Nov 62.
5. Msg, DXI 8765, SAC to OSAF, for SAFOI-1, 2 Nov 62.
6. Ltr, Gen T. S. Power, CINCSAC, to Hon R. S. McNamara, SecDef, 7 Nov 62.

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